

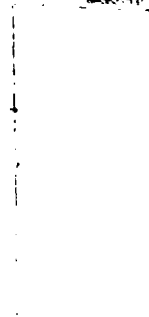
**AIRCRAFT CONTROL AND WARNING RADAR CAREER LADDER(U) AIR
FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX
JUL 85**

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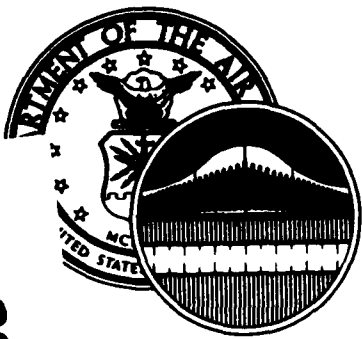
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UNITED STATES AIR FORCE



OCCUPATIONAL SURVEY REPORT

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AIRCRAFT CONTROL AND WARNING RADAR
CAREER LADDER

AFSC 303X2
AFPT 90-303-543
JULY 1985

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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Aircraft Control and Warning Radar career ladder (AFSC 303X2). The project was undertaken at the request of Keesler Technical Training Center, with priority established by the Occupational Analysis Program Priorities Working Group (PWG) in accordance with AFR 35-2. Computer printouts from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by Chief Master Sergeant Donald J. Cochran, Inventory Development Specialist. Computer programming support for this project was provided by Sergeant Ray Tackett. Mr Hank Dubois, Occupational Analyst, analyzed the survey data and wrote the final report. This report has been reviewed and approved by Major Charles D. Gorman, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be obtained on request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150-5000.

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SUMMARY OF RESULTS

1. Survey Coverage: Job Inventory booklets were administered to Aircraft Control and Warning Radar personnel (AFSC 303X2) worldwide. Survey results are based on the responses of 764 incumbents (68 percent of the assigned personnel).

2. Specialty Jobs: The study identified 11 major jobs. A majority of incumbents were found to be performing primarily maintenance type tasks and were found in such jobs as Junior AC&W Radar Personnel, Fixed Radar Maintenance Personnel, Tactical Radar Maintenance Personnel, or Tactical Radar Crew Members. Job satisfaction across jobs varied, with smaller non-maintenance jobs expressing somewhat lower satisfaction.

3. Career Ladder Progression: Indicative of the 3-skill level job was a large amount of time spent performing general and preventive maintenance tasks, although 3-levels also performed tasks across all radar maintenance activities. Five-skill level personnel performed the same basic job, but spent a little less time on maintenance duties while assuming some supervisory responsibilities. Seven-skill level personnel were performing duties as workcenter NCOICs or nonsupervisory managers, spending only 20 percent of their job time performing technical tasks.

As time in service increased, there was a corresponding increase in the performance of duties involving management, supervision, and administration.

Job satisfaction indicators for first-enlistment 303X2 incumbents were very similar to those in other mission equipment maintenance career ladders.

4. Training Analysis: The 303X2 STS generally was supported by survey data, although a few unique elements need review due to low percent of members performing matched tasks. Analysis of the basic course POI revealed that, based on percent members performing tasks, the course is well supported and appears to meet the needs of entry level AC&W personnel. Managers do need to review the computerized listing of tasks not referenced to the POI which contains several tasks where the probability of performance for first-enlistment personnel is between 30 and 50 percent.

5. MAJCOM Comparisons: TAC was the major user of 303X2 personnel resources, followed, in order, by AFCC, USAFE, ATC, and PACAF. Of these commands, the jobs performed by TAC, USAFE, and PACAF were the most similar, although USAFE personnel spent much more time performing mobility-related tasks. AFCC personnel were best differentiated by the time spent performing duties involving management, radar evaluation, and engineering installation. As expected, ATC personnel were performing resident classroom training and were not performing any operational maintenance.

6. CONUS Versus Overseas Group Analysis: Overall, the jobs performed by these two groups of AC&W radar personnel were very similar, although due to the mobile AC&W radar mission overseas, mobility-related tasks were performed by a greater percentage of that group.

7. Implications: The 303X2 career ladder appears to be going through a significant equipment upgrading or replacement program; however, occupational survey data reflect that training programs appear to have been developed to keep abreast of changing technologies. In addition, although certain career ladder unique jobs may be an exception, job satisfaction indicators reflect a much more satisfied population than the last survey of the AC&W career ladder.

OCCUPATIONAL SURVEY REPORT
AIRCRAFT CONTROL AND WARNING RADAR CAREER LADDER
(303X2)

INTRODUCTION

This is an occupational survey report (OSR) of the Aircraft Control and Warning Radar career ladder (AFSC 303X2) completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in July 1985. The survey was conducted in response to a request from the career ladder training manager, Keesler Technical Training Center, to assess current training. The last survey of the 303X2 ladder was in 1980 and was part of a multiladder survey of three radar maintenance specialties (AFSCs 303X1, 303X2, and 303X3). That survey was accomplished for AFS merger considerations and was thought to be too broad for an accurate evaluation of 303X2 training. The last single ladder survey report of the Aircraft Control and Warning (AC&W) Radar specialty was published in 1978.

Background

As outlined in the current AFR 39-1 Specialty Descriptions, Aircraft Control and Warning Radar personnel are responsible for installing, inspecting, maintaining, and repairing fixed or mobile ground types of aircraft control and warning radar, related radar operator training devices, and associated identification and test equipment. These incumbents may also perform duty as a height finder radar maintainer/operator. Aircraft control and warning radars generally are used to detect and identify aircraft in the defense of North America or Europe.

The 303X2 career ladder was created in 1953. In 1955, the 3- and 5-skill level personnel were subdivided into six shreds. Each shred specialized in the following types of equipment:

	303X2A - CPS/1/4/5
	303X2B - TPS/1D/10D
	303X2C - FPS/3/6
1955	303X2D - CPS/6B
	303X2E - FPS/4/8
	303X2F - FPS/14

1957	303X2G - FST/2
	303X2H - GPA/37

In 1957, two additional 3- and 5-skill level shreds were added. All eight shreds were deleted in early 1959. The 7-skill level designation remained basically unchanged from 1953 to the present.

Since the last OSR (May 1981), there has been an increase in the specialty in the amount of tactical/mobile equipment maintained. Generally, this mobile equipment is state-of-the-art as opposed to the older vacuum tube fixed equipment. In addition, fixed AC&W radar systems gradually are being upgraded or replaced with newer digital equipment.

Formal training for personnel desiring to enter the 303X2 specialty is available at Keesler AFB MS. This is a 32-week course in which future Aircraft Control and Warning Radar Repairmen are oriented in the areas of electronic principles, digital principles, radar subsystem principles, and preventive maintenance techniques. Upon completion of this course, graduates are awarded a 3-skill level and are assigned to various units worldwide.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-303-543, dated January 1984. A preliminary task list was prepared after reviewing pertinent career ladder publications and directives, tasks from previous job inventories, and data from the last OSR. This preliminary task list was refined and validated through personal interviews with subject-matter specialists selected to cover a wide variety of AFS 303X2 equipment and functions at the following locations:

3395 TCHTG, Keesler AFB MS -
Location of the basic AC&W radar course

2052 Comm Sq, Keesler AFB MS -
303X2 personnel maintain equipment in
support of the technical school

1839 Engineering Installations Group,
Keesler AFB MS - Assigned 303X2 personnel
install or modify systems normally in teams
TDY to sites

1954 Radar Evaluation Sq, Hill AFB UT -
303X2 personnel manage the Air Force Radar
Technical Evaluation Program

727 Tactical Control Sq (Test),
Hurlburt Fld FL - Responsible for personnel
and equipment performance testing

2021 Comm Sq, Tyndall AFB FL -
303X2 personnel maintain communications-
electronics equipment other than AC&W radar
(ancillary support equipment)

507 Tactical Air Control Wg, Shaw AFB SC -
Functional management location for communications-
electronics maintenance matters

701 Radar Sq, Ft Fisher AFS NC -
Representative "fixed" radar site

72 Tactical Control Flt, Ft Monroe AFS VA -
Representative "mobile" radar site

This process resulted in a final job inventory containing a list of 797 tasks grouped within 18 duty headings. The inventory also included a background section asking such information as time spent TDY, maintenance experience, and questions on systems and associated equipment maintained or used on the job.

Survey Administration

From February through October 1984, Consolidated Base Personnel Offices (CBPO) at operational units worldwide administered the inventory to job incumbents holding DAFSC 303X2. These job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each individual who completed the inventory first completed an identification and background section and then checked each task performed in their current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) through five (about average time spent) to nine (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of an incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. All eligible DAFS 303X2 personnel were mailed survey booklets. Table 1 shows the percentage distribution by major command, of assigned personnel in the career ladder as of August 1984. Also listed in this table is the percentage distribution, by MAJCOM, of respondents in the final survey sample. The 764 respondents included in the final sample represent 80 percent of the 303X2 career ladder personnel eligible for the survey. (Personnel projected for PCS, retirement, or discharge; those in hospital status, and those with less than 6 weeks on the job are not eligible for survey).

Table 2 reflects the paygrade group distribution, while Table 3 lists the sample distribution by TAFMS groups. As reflected in these tables, the survey sample provides a very good representation of the career ladder population.

TABLE 1

COMMAND REPRESENTATION OF SURVEY SAMPLE

<u>MAJOR COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
TAC	49	53
AFCC	21	21
USAFE	16	14
ATC	4	6
PACAF	4	4
OTHERS	6	2

TOTAL 303X2 PERSONNEL ASSIGNED - 1,121
 TOTAL 303X2 PERSONNEL ELIGIBLE - 957
 TOTAL 303X2 PERSONNEL SAMPLED - 764
 PERCENT OF ASSIGNED SAMPLED - 68%
 PERCENT OF ELIGIBLE SAMPLED - 80%

NOTE: Manning figures as of August 1984

TABLE 2

PAYGRADE REPRESENTATION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AIRMEN	44	45
E-4	16	14
E-5	16	18
E-6	14	14
E-7	10	9

TABLE 3

 TOTAL ACTIVE FEDERAL MILITARY SERVICE (TAFMS)
 DISTRIBUTION OF SURVEY SAMPLE

	<u>MONTHS FEDERAL SERVICE</u>					
	<u>1-48</u>	<u>49-96</u>	<u>97-144</u>	<u>145-192</u>	<u>193-240</u>	<u>241+</u>
NUMBER IN AFSC 303X2 ASSIGNED	561	155	119	98	154	34
PERCENT OF AFSC 303X2 ASSIGNED	50%	13%	11%	9%	14%	3%
NUMBER IN AFSC 303X2 SAMPLE	397	78	83	75	104	27
PERCENT OF AFSC 303X2 SAMPLE	52%	10%	11%	10%	14%	3%

Task Factor Administration

In addition to completing the job inventory, selected senior 303X2 personnel (generally E-6 and E-7 technicians) were asked to complete a second booklet for either training emphasis (TE) or task difficulty (TD). Major command distribution of these raters appears in Table 4. The TE and TD booklets are processed separately from the job inventories. The rating information is used in several analyses discussed in detail within this report.

Task Difficulty. Each senior technician completing a task difficulty booklet is asked to rate all inventory tasks on a 9-point scale (from extremely low to extremely high) as to relative difficulty. Difficulty is defined as the length of time required by an average member to learn to do the task. Task difficulty data were independently collected from 46 experienced 7-skill level 303X2 personnel stationed worldwide, with all raters assessing the difficulty of inventory tasks. If raters were in complete agreement on task difficulty for the specialty, the interrater reliability would be 1.0. The 303X2 raters' interrater reliability was very good (.94) indicating general consensus on the ease or difficulty of different tasks within the AC&W radar career field. Task difficulty ratings were adjusted so tasks of average difficulty would have a 5.00 rating. The resulting data are essentially a rank ordering of tasks indicating the relative degree of difficulty for each task in the inventory.

Job Difficulty Index (JDI). After computing the 303X2 task difficulty index for each task item, a Job Difficulty Index (JDI) was computed for the job groups identified in the survey analysis. The index provides a relative measure of which jobs, when compared to other jobs identified, are more or less difficult. An equation using the number of tasks performed and the average difficulty per unit time spent (ADPUTS) as variables is the basis for the JDI. The index ranges from 1.0 for very easy jobs to 25.0 for very difficult jobs. The indices are adjusted so the average JDI is 13.00.

Training Emphasis. Experienced technicians completing training emphasis booklets were asked to rate tasks on a 10-point scale ranging from no training required (0) to extremely heavy training required (9). Training emphasis is a rating of which tasks require more emphasis in structured training for first-term personnel. Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Training emphasis data were independently collected from 73 experienced 303X2 7-skill level personnel stationed worldwide. As with task difficulty ratings, if all raters were in complete accord on what tasks were important for first-enlistment training, the interrater reliability would be 1.0. The 303X2 raters' interrater reliability was again very good (.97) indicating raters generally agreed on the tasks requiring some form of structured training to support first-enlistment jobs.

When used in conjunction with other information, such as percent members performing, task difficulty and training emphasis ratings can provide insight into training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting AFS entry-level jobs.

TABLE 5

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT TIME SPENT)

DUTIES	RADAR MAINT SUPV (N=96)			QUALITY CONTROL INSP (N=33)			PROGRAM MANAGERS (N=6)			JUNIOR AC&W PERS (N=67)			FIXED RADAR MAINT PERS (N=159)			TACTICAL RADAR MAINT PERS (N=161)		
A ORGANIZING AND PLANNING	13			8			17			1			1			2		
B DIRECTING AND IMPLEMENTING	14			10			17			1			2			2		
C EVALUATING AND INSPECTING	13			(31)			(32)			4			3			3		
D TRAINING	10			6			1			1			2			2		
E PERFORMING ADMINISTRATIVE TASKS	20			(34)			(27)			8			7			7		
F PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	12			5			4			7			5			6		
G PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	4			1			1			(30)			19			14		
H MAINTAINING RADAR TRANSMITTER SYSTEMS	2			*			0			8			17			11		
I MAINTAINING ANTENNA SYSTEMS	*			*			0			3			5			4		
J MAINTAINING WAVE-GUIDE SYSTEMS	*			*			0			1			3			3		
K MAINTAINING RADAR RECEIVERS AND TIMING SYSTEMS	1			*			0			8			8			3		
L MAINTAINING INDICATORS OR VIDEO MAPPERS	2			*			0			16			12			9		
M MAINTAINING ANTIJAM SYSTEMS	*			0			0			*			*			1		
N MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	2			*			0			6			4			7		
O MAINTAINING RADOMES	*			*			0			*			1			*		
P MAINTAINING RADAR TRAINERS	1			*			0			2			*			2		
Q INSTALLING, TESTING, AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	6			3			0			2			*			(12)		
R PERFORMING RADAR EVALUATION FUNCTIONS	*			*			0			0			*			*		

* Denotes less than .5 percent

XI. INSTRUCTOR PERSONNEL (GRP040). All but 2 of these 33 incumbents are assigned to ATC, and 67 percent hold a DAFSC of 30352 and the remainder hold the 7-skill level. Three jobs are identifiable within this cluster. Differentiating factors among the three jobs are the amount of time spent in classroom training, maintenance tasks performed, and the amount of time spent in administrative functions. AC&W Radar Repair Instructors perform a few maintenance tasks in the process of providing radar repair instruction, with training representing 78 percent of their job time. The Electronic Principles Instructors spend 92 percent of their job time in training activities. Members of the third job type, Support Instructor Personnel, spend 17 percent of their time performing administrative tasks in support of formal instruction. Examples of tasks performed by the INSTRUCTOR PERSONNEL include:

- administer or score tests
- conduct technical school classroom training
- prepare lesson plans
- evaluate progress of technical school students
- write test questions
- develop performance tests

A review of job satisfaction data reveals these incumbents are among the most satisfied of all major job groups. For example, 91 percent find their jobs interesting and 94 percent perceive their talents are being utilized at least fairly well.

Summary

The 303X2 career ladder is fairly diverse, with a wide variety of jobs being performed by 303X2 personnel; however, the primary job of AC&W radar repair can be roughly divided into two large groups, one group involved with maintenance of tactical or mobile radar and related equipment of an advanced technology, and the other involving maintenance of older mostly vacuum tube type fixed radar systems. The tactical radar group performs a somewhat larger job because of additional tasks related to equipment and personnel mobility requirements. Job satisfaction expressed by these two groups was fairly good, with the tactical radar group expressing a slightly higher satisfaction. Across all the major jobs, the degree of job satisfaction was somewhat mixed, with the amount of satisfaction appearing to be directly related to narrowness of the job--the degree of satisfaction decreased with the size of the job.

Members of the second job type, Radar Evaluation Specialists, are all assigned to the 1954 Radar Evaluation Squadron (AFCC) and 80 percent of the incumbents hold a DAFSC of 30352. They spend 35 percent of their job time in unique radar evaluation activities and 21 percent in antenna and indicator operational checks. Differentiating tasks include:

- perform solar boresight and azimuth
orientation checks
- prepare solar collection and reduction reports
- perform RHI operational checks
- perform antenna drive and control system
operational checks
- perform signal distribution system operational
checks

Only 54 percent of the members of this cluster reported finding their jobs interesting. Thirty-eight percent felt both their talents and training were used very little or not at all. Factors that might generate these perceptions may be the limited opportunity to use their extensive training or possibly the amount or frequency of TDY required by their job (42 percent reported performance of 61-180 days TDY during the last 12 months).

X. JOB CONTROLLERS (GRP214). Eighty-three percent of the members of this independent job type hold a DAFSC of 30352--the remainder possess a 30372. These personnel are responsible for job or maintenance control functions associated with AC&W radars and related equipment. They spend very little time on radar maintenance (5 percent) but, instead, perform a variety of administrative tasks (58 percent of their job time). They commonly perform such tasks as:

- update MMICS
- maintain status boards or job control boards
- conduct briefings
- document cannibalization
- report communication outages
- determine work priorities

These incumbents perform a very low average number of tasks (13), with the 6 tasks above making up 47 percent of their total job time. These incumbents perform the easiest job of all major job groups identified, having a JDI of 5.1. Job satisfaction indicators reflect the fact that these personnel perform a very narrow job, with only 33 percent finding their job interesting and only 17 percent perceiving their training is being utilized at least fairly well.

These respondents perform an average of 93 tasks and have a less than average JDI (11.0). They are very junior personnel (average paygrade of E-3) and average less than 2 years in service (20 months). Most of the incumbents are TAC resources (75 percent), with the remainder assigned to USAFE. Personnel in this group appeared to be satisfied with their job.

VIII. ENGINEERING INSTALLATION TEAM MEMBERS (GRP195). The job performed by this independent job type is somewhat similar to the previous job type--the difference being these members are responsible for fixed site installations (17 percent of their job time) and fixed antenna maintenance (22 percent of their job time). All are assigned to AFCC engineering installation units in CONUS. Typical tasks performed include:

- install or remove cable support systems
- install or remove fixed-site antennas
- remove or replace antenna slip ring assemblies
- construct cable troughs
- remove or replace elevation data generators
- remove or replace antenna sections
- remove or replace antenna reflectors
- measure antenna contours

This group also resembles the previous one in job size (average number of tasks = 76) and job difficulty (JDI = 11.0). They average 29 months in service and have an average paygrade of E-3. Although they find their job very interesting and somewhat satisfying, they feel their training and talents are used very little. Only 33 percent indicate favorable reenlistment intentions.

IX. RADAR EVALUATION PERSONNEL (GRP014). This group of senior NCOs (average paygrade of E-6) spend 61 percent of their job time in administrative or evaluation and inspection functions. These members perform a limited and specialized job (average number of tasks performed = 27). Two distinct job types are found in this cluster. Electronic Systems Analysts are all assigned to the 1833 Communications Squadron (AFCC) and hold a DAFSC of 30372. This group spends a significant amount of job time (32 percent) performing management functions of planning and implementing. Differentiating tasks include:

- conduct SAGE testing
- analyze trends in system malfunctions
- coordinate flight checks of installed equipment with chief of maintenance
- prepare inspection trend analyses
- analyze SAGE testing results

- perform radar receiving system operations
 - checks using BITE
- pressurize SF6 tanks
- erect mobile antennas
- adjust digital MTI receivers
- adjust side lobe receiver circuits
- remove or replace solid-state devices
- pack radar equipment for deployment or redeployment
- perform signal distribution system operational checks
- perform SIF system operational checks
- level antenna pedestals
- adjust cursor circuits

The mission of TACS is such that a significant number of these incumbents are overseas (40 overseas) and a majority are assigned to either TAC (54 percent) or USAFE (33 percent). Like the fixed radar cluster, this group has an average paygrade of E-4; however, they have slightly more time in service (an average of 64 months). Job satisfaction in this group appears very good, with 85 percent reporting they find their job interesting. Ninety-two percent perceived their training to be utilized at least fairly well.

There are four jobs identified in the cluster--two journeyman repairmen jobs and two corresponding supervisory jobs. Tactical Radar Repairmen perform the generic job within this cluster, that is, TPS-43E maintenance. The immediate supervision of this group comes from the 24 members of the Tactical Radar Maintenance Supervisors. The two groups identified as Tactical Radar Trainer Repairmen and Tactical Radar Trainer Maintenance Supervisors spend a great amount of time maintaining older GPS-T2/T4 radar trainers, in addition to TPS-43E maintenance.

VII. TACTICAL RADAR CREW MEMBERS (GRP292). This independent job type of 12 members is responsible for site erection and teardown of the mobile TPS-43E radar. They spend a relatively large amount of time (27 percent) performing tasks pertaining to radar installation and removal functions. Tasks performed by a majority of these incumbents include:

- perform general housekeeping procedures
- teardown mobile antennas
- assemble or disassemble mobile radar
 - equipment for mission deployments
- perform corrosion control
- erect mobile antennas
- anchor radar equipment
- remove or replace cables
- repair, fold, and pack camouflage netting

- adjust modulator control circuits
- lubricate antenna system components
- remove or replace transmit-receive (TR) tubes
- adjust wave-guide pressurization systems
- adjust crystal mixers
- isolate STALO malfunctions
- adjust range mark circuits
- adjust sweep generating circuits

Seventy-six percent of these personnel are in CONUS, and 76 percent are assigned to TAC. The group has an average paygrade of E-4 and an average of 55 months in service. Job satisfaction indicators show this group to be fairly well satisfied. Talents and training are perceived as being at least fairly well utilized by 86 and 84 percent of the group, respectively. Seventy-two percent report they find their job interesting.

There are six jobs identified in this cluster, and discriminating factors are the average number of tasks performed, supervisory tasks performed, and type of radar or radar equipment maintained. Fixed Search Radar Repairmen are responsible for maintenance of several search radar systems. They are most like the parent cluster in average number of tasks and time spent across duties. Fixed Search Radar Maintenance Supervisors are first-line supervisors responsible for supervision of the previous job type. They spend 22 percent of their job time in supervision, have an average grade of E-5, and perform an average of 259 tasks. Height Finder Radar Maintenance Repairmen are assigned to height finder workcenters and maintain the FPS-116 radar and OA-929 radar indicator. Height Finder Radar Maintenance Supervisors parallel the previous job in respect to maintenance tasks performed; however, they spend 29 percent of their job time in a supervisory role. AN/FPS-91 Radar Repairmen spend somewhat more time on maintenance of SIF equipment. The AN/FPS-91 Radar Transmitter Specialist job incumbents spend 44 percent of their job time on the FPS-91 transmitter system, with the rest of their job somewhat limited to general and preventive maintenance.

VI. TACTICAL RADAR MAINTENANCE PERSONNEL (GRP142). This cluster has maintenance responsibility over the AN/TPS-43E mobile radar set, an air-transportable three-dimensional radar, which provides the AC&W function within the Tactical Air Control System (TACS). This is the largest major job identified--161 incumbents performing an average of 230 tasks (JDI=17.6). These incumbents spend 12 percent of their job time performing tasks related to mobile capability of their equipment. Also differentiating this cluster from the previous fixed radar maintenance cluster are tasks relating to the advanced digital technology found in their equipment. Ninety-six percent of these incumbents report maintaining the TPS-43E. The same percentage, or more, maintain the UPX-23 interrogator/responder, the UPA-59/59A decoder, and a variety of solid-state ancillary equipment. Also maintained by a smaller percentage are both solid-state and older type radar trainers. Tasks commonly identifiable with this cluster include:

largest amount of their job time (30 percent) is that of general and preventive maintenance. Maintenance of indicators and video mappers consumes the next largest amount of their job time (16 percent). Examples of tasks performed by these incumbents include:

- perform corrosion control
- make entries on AFTO Forms 349
- perform general housekeeping procedures
- remove or replace discrete electronic components
- perform power supply operational checks
- perform PPI operational checks
- adjust range mark circuits
- adjust sweep generating circuits
- adjust CRT protection circuits
- perform radar transmitter operational checks

Eighty-seven percent of these personnel are located in the CONUS and 67 percent are assigned to TAC. These personnel appear relatively satisfied with their job, with 75 percent perceiving their job as interesting and only 16 percent indicating dissatisfaction with their sense of job accomplishment.

The five job types identified in this cluster spend 23 to 35 percent of their job time on general and preventive maintenance tasks. Differentiating tasks among these jobs related to assigned or supported mission or workcenter. Electronic Combat Range Radar Repairmen are most like the cluster in regard to time spent across all duties. They maintain the MPS-11 radar system in support of the electronic combat range mission. Weapons Range Radar Repairmen are differentiated from the other jobs in the cluster by the time they spend on transmitters. Like the previous group, they also maintain the MPS-11. Ancillary Workcenter Repairmen do not report maintaining any type of radar but, instead, maintain such equipment as UPA-35 radar indicators, GPA-30 video mappers, and the GPS-T4 radar trainer. SIF Repairmen likewise do not maintain radars systems but, maintain coder-decoder systems and the XPX-14 interrogator/responder set. Radar Height Finder Operators maintain the OA-929 radar indicator. Differentiating tasks involve radar height indicators, radomes, and wave-guides.

V. FIXED RADAR MAINTENANCE PERSONNEL (GRP171). This is the second largest maintenance group identified (N=159). This is a journeyman group of radar maintainers performing the full range of maintenance on a variety of AC&W fixed type radars, such as the FPS-6A, FPS-90, FPS-91, or the FPS-116. Members of this cluster perform an average of 145 tasks and the job they perform has a job difficulty index of 15.1 (13.0 is average). A sampling of the tasks performed includes:

- remove or replace discrete electronic components
- isolate power supply malfunctions other than solid-state
- perform radar transmitter operational checks

- prepare inspection reports
- make entries on AF Forms 2420 (Quality Control Inspection Summary)
- implement quality control programs
- evaluate technical performance of personnel
- conduct maintenance inspections
- evaluate quality control procedures
- perform corrosion control inspections
- evaluate materiel deficiency reports (MDR)

Job satisfaction data reveal these incumbents are fairly satisfied with 79 percent indicating their jobs are interesting and their training at least fairly well utilized. Seventy-nine percent indicate their talents are being used at least fairly well.

III. AC&W PROGRAM MANAGERS (GRP161). The five members of this independent job type spend less than 2 percent of their job time on radar maintenance tasks. They are the most senior group identified in the survey sample (averaging over 18 years in service with an average paygrade of E-7); all hold a DAFSC of 30372. These personnel function as radar systems managers or radar technical advisors at group level or above. Like the previous group, they spend most of their job time in evaluation, inspection, and administrative activities. Tasks indicative of their job include:

- compile information for reports or staff studies
- evaluate materiel deficiency reports (MDR)
- conduct staff assistance visits
- evaluate technical literature deficiency reports
- prepare modification proposals
- review drafts of regulations, manuals, or other directives
- evaluate technical order improvement reports
- evaluate data on development or modification of equipment

Although 80 percent of this group indicated their job was interesting, 100 percent reported they were less than satisfied with the sense of accomplishment gained from their job. A majority of this group (60 percent) also perceived that their talents and training were used less than fairly well.

IV. JUNIOR AC&W RADAR MAINTENANCE PERSONNEL (GRP083). All 67 of the personnel in this cluster hold a DAFSC 30332 or 30352, and 91 percent are in their first enlistment. They spend 78 percent of their time on radar maintenance tasks but, due to their limited experience (averaging only 25 months in the career field), they perform substantially fewer tasks (an average of 63) than either of the other two maintenance clusters. The duty taking up the

I. RADAR MAINTENANCE SUPERVISORS (GRP071). Seventy-one percent of these NCOs hold DAFSC 30372. The personnel in this cluster are the workcenter supervisors of the 303X2 career ladder and spend 82 percent of their job time performing administrative and supervisory tasks associated with their function. Seventy-nine percent of these incumbents supervise an average of four personnel; that is the greatest supervisory role of any of the major job groups identified. Tasks performed by high percentages of personnel in this cluster include:

- determine work priorities
- participate in meetings
- write APRs
- counsel personnel on personal or military-related problems
- orient newly assigned personnel
- perform self-inspections
- establish work schedules
- maintain training records, charts, or graphs

There were five fairly homogeneous job types in this cluster. The differentiating factors for these job types seem to be the average number of tasks performed and the amount of time spent performing various supervisory or maintenance duties. NCOICs, Fixed Radar Maintenance and NCOICs, Tactical Radar Maintenance are performing the same supervisory tasks; however, the latter job is differentiated by the time spent on maintenance duties. The tactical group spends 23 percent more time in maintenance activity, with 13 percent of that time spent on mobile site unique tasks (Duty Q). NCOICs, Ancillary Maintenance are differentiated by tasks relating to indicators, video mappers, and radar trainers. NCOICs, Job Control spend more time on planning, directing, and administrative tasks than any other group in this cluster. Instructor Supervisors are differentiated by the large percentage of time spent (40 percent) performing training tasks. (For more information about these groups, and those to follow, see Appendix A).

II. QUALITY CONTROL INSPECTORS (GRP275). The personnel making up this independent job type are responsible for the quality control and assurance programs associated with the various types of AC&W radars and related equipment. These incumbents are rather senior (averaging 202 months in service with an average paygrade of E-6), with an average of 185 months in the career field. These personnel spend very little time maintaining AC&W radars (6 percent) but instead spend most of their time performing evaluation and inspection duties (31 percent) and administrative duties (34 percent). Examples of tasks typically performed by these incumbents are:

Support Specialist, Controller, NCOIC/Quality Control, Workcenter Supervisor, Customer Liaison, and Unit Radar Repairman. These personnel did not group with any cluster or job type because of either the uniqueness of the job they perform or the manner in which they perceived their job.

Overview

Generally, the 303X2 career ladder is fairly diverse, with a wide variety of radar maintenance, maintenance support, administrative, and supervisory jobs being performed. The supervisory and administrative jobs are representative of those found in most maintenance career ladders, e.g., NCOICs, Program Managers, Quality Control Inspectors, Job Controllers, and Instructors. The key differentiating factor for the personnel in these jobs appears to be the amount of time spent performing supervisory, administrative, or training related tasks.

The maintenance and maintenance support jobs include four clusters and two independent job types. The differentiating factors among these jobs appear to involve the type of radars (fixed or tactical) or radar equipment maintained, or the average number of tasks performed.

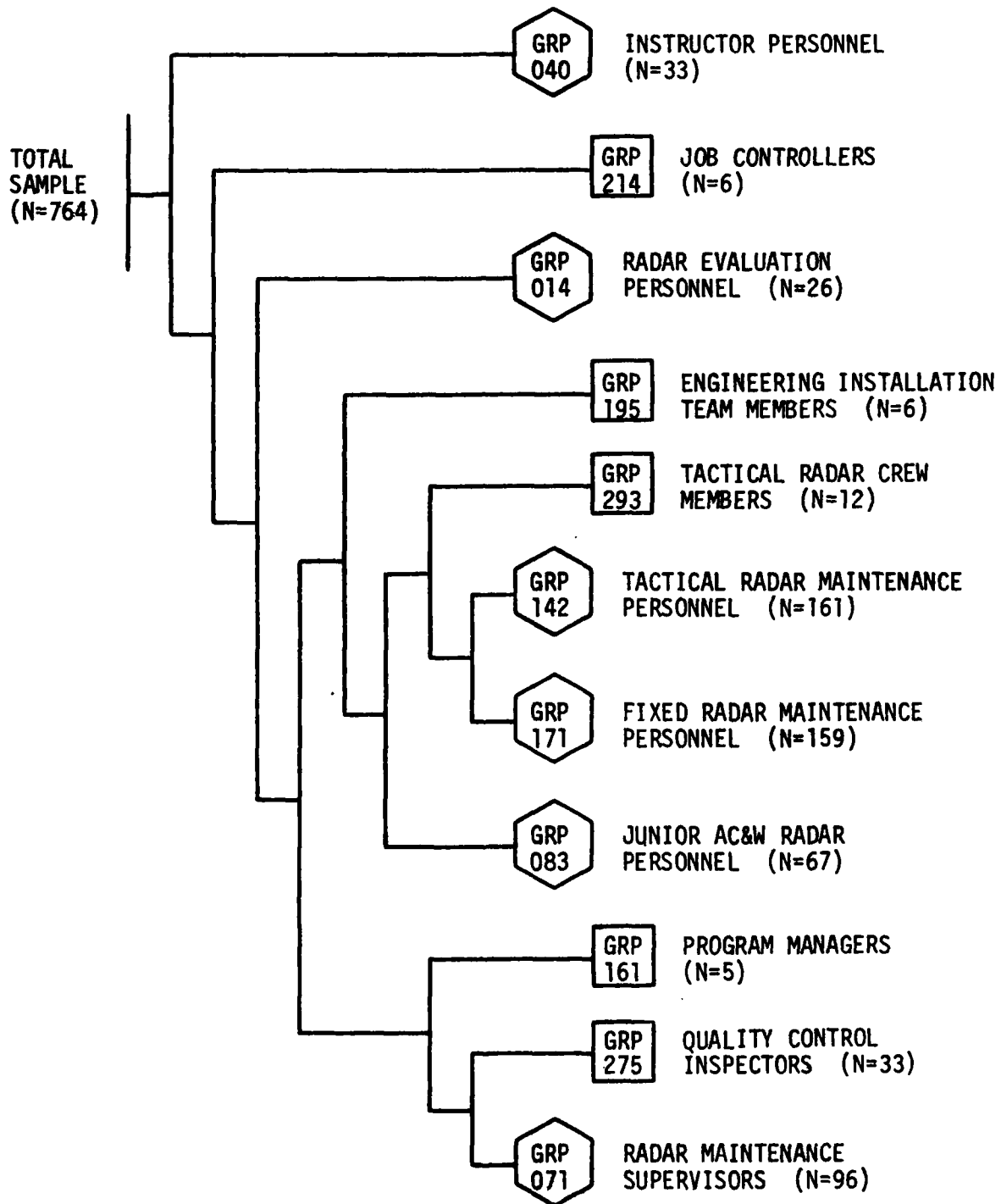
Brief descriptions of each cluster and independent job type are presented below. Three tables at the end of this section provide additional information about the clusters and independent job types. Table 5 provides the relative time spent on each duty by the personnel in each of the major groups identified. For example, Junior AC&W Radar Personnel spend 16 percent of their job time maintaining indicators or video mappers, while the Tactical Radar Crew Members spend 27 percent of their job time installing, testing, and operating radar and auxiliary equipment for site or mobility. Table 6 provides selected background information, such as DAFSC, MAJCOM, and average months in service (TAFMS) for the major job groups. For example, 48 percent of the Junior AC&W Radar Personnel hold the 3-skill level, 66 percent are assigned to TAC, and they average 29 months in the service. Table 7 provides job satisfaction data for the major job groups, and may help indicate where potential morale problems might exist. For example, the Job Controllers appear to be very dissatisfied, with only 33 percent finding their job interesting, and only 17 percent feeling their training is being utilized at least fairly well.

Also included in this report is an appendix concerning the AC&W Radar specialty jobs. Appendix A provides various duty and background information for all the jobs identified in the career ladder structure analysis, including the jobs within each cluster. This appendix also lists common tasks performed by members of each of the jobs identified.

- II. QUALITY CONTROL INSPECTORS (GRP275, N=33)
- III. AC&W PROGRAM MANAGERS (GRP161, N=5)
- IV. JUNIOR AC&W RADAR MAINTENANCE PERSONNEL (GRP083, N=67)
 - A. Electronic Combat Range Radar Repairmen (GRP237, N=9)
 - B. Weapons Range Radar Repairmen (GRP270, N=11)
 - C. Ancillary Workcenter Repairmen (GRP228, N=9)
 - D. Selective Identification Feature (SIF) Repairmen (GRP314, N=6)
 - E. Radar Height Finder Operators (GRP260, N=7)
- V. FIXED RADAR MAINTENANCE PERSONNEL (GRP171, N=159)
 - A. Fixed Search Radar Repairmen (GRP316, N=62)
 - B. Fixed Search Radar Maintenance Supervisors (GRP375, N=16)
 - C. Height Finder Radar Maintenance Repairmen (GRP300, N=38)
 - D. Height Finder Radar Maintenance Supervisors (GRP330, N=7)
 - E. AN/FPS-91 Radar Repairmen (GRP297, N=14)
 - F. AN/FPS-91 Radar Transmitter Specialists (GRP459, N=6)
- VI. TACTICAL RADAR MAINTENANCE PERSONNEL (GRP142, N=161)
 - A. Tactical Radar Repairmen (GRP327, N=99)
 - B. Tactical Radar Maintenance Supervisors (GRP355, N=24)
 - C. Tactical Radar Trainer Maintenance Supervisors (GRP371, N=8)
 - D. Tactical Radar Trainer Repairmen (GRP321, N=6)
- VII. TACTICAL RADAR CREW MEMBERS (GRP293, N=12)
- VIII. ENGINEERING INSTALLATION TEAM MEMBERS (GRP195, N=6)
- IX. RADAR EVALUATION PERSONNEL (GRP014, N=26)
 - A. Electronic Systems Analysts (GRP175, N=5)
 - B. Radar Evaluation Specialists (GRP391, N=5)
- X. JOB CONTROLLERS (GRP214, N=6)
- XI. INSTRUCTOR PERSONNEL (GRP040, N=33)
 - A. AC&W Radar Repair Instructors (GRP259, N=12)
 - B. Electronic Principles Instructors (GRP202, N=6)
 - C. Support Instructor Personnel (GRP251, N=8)

DAFSC respondents forming these job types and clusters account for 79 percent of the survey sample. The remaining 21 percent did not group with any of the clusters or job types listed above. Some of the job titles held by those not grouped were: Communications Engineering Technician, Unit Logistics

FIGURE 1
303X2 CAREER LADDER STRUCTURE



 CLUSTER
 INDEPENDENT JOB TYPE

SPECIALTY JOBS

The structure of jobs within the Aircraft Control and Warning (AC&W) Radar career ladder was examined on the basis of similarity of tasks performed and the percent of time spent ratings provided by job incumbents, independent of specialty or other background factors.

For the purpose of organizing individual jobs into similar units of work, an automated job clustering program is used. This hierarchical grouping program is a basic part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups or new groups are formed based on the similarity of tasks and percent of time ratings in each individual job description. This procedure is continued until all individuals and groups are combined to form a single composite representing the total sample. The resulting analysis of the variety of groups of jobs serves to identify: (1) the number of characteristics of the different jobs which exist within the career ladders; (2) the tasks which tend to be performed together by the same respondents; and (3) the breadth or narrowness of the jobs which exist within the Aircraft Control and Warning Radar career ladder.

The basic identifying group used in the hierarchical job structuring process is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as Clusters. In many career ladders, there are specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled Independent Job Types.

Based on the similarity of tasks performed and the amount of time spent performing each task, six clusters and five independent job types were identified in the examination of the AC&W radar career ladder. These major jobs are illustrated in Figure 1 and are described on the following pages. The group (GRP) number shown beside each title is a reference to computer-printed information and the letter N refers to the number of personnel in the group:

I. RADAR MAINTENANCE SUPERVISORS (GRP071, N=96)

- A. NCOICs, Fixed Radar Maintenance (GRP190, N=28)
- B. NCOICs, Tactical Radar Maintenance (GRP218, N=18)
- C. NCOICs, Ancillary Maintenance (GRP201, N=6)
- D. NCOICs, Job Control (GRP229, N=7)
- E. Instructor Supervisors (GRP231, N=5)

TABLE 4

TASK FACTOR RATER MAJCOM DISTRIBUTION

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF TE RATERS</u>	<u>PERCENT OF TD RATERS</u>
TAC	49	51	48
AFCC	21	24	22
USAFE	16	13	22
ATC	4	0*	6
PACAF	4	6	2
OTHERS	6	6	0

* Training emphasis ratings are not routinely gathered from ATC personnel

TABLE 5 (CONTINUED)

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT TIME SPENT)

DUTIES	TACTICAL		ENGRG		RADAR		JOB		INSTR PERS (N=33)
	RADAR CREW MEMBERS (N=12)	INSTL TEAM MEMBERS (N=6)	EVAL PERS (N=26)	CONTROLLERS (N=6)					
A ORGANIZING AND PLANNING	*	2	9	14					5
B DIRECTING AND IMPLEMENTING	*	*	8	10					6
C EVALUATING AND INSPECTING	1	2	(24)	1					6
D TRAINING	*	*	1	2					(69)
E PERFORMING ADMINISTRATIVE TASKS	6	2	14	(58)					9
F PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	7	3	6	10					2
G PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	16	(34)	3	2					1
H MAINTAINING RADAR TRANSMITTER SYSTEMS	10	4	1	0					*
I MAINTAINING ANTENNA SYSTEMS	5	(22)	2	0					*
J MAINTAINING WAVE-GUIDE SYSTEMS	3	5	0	0					*
K MAINTAINING RADAR RECEIVERS AND TIMING SYSTEMS	11	3	2	0					1
L MAINTAINING INDICATORS OR VIDEO MAPPERS	8	1	2	0					*
M MAINTAINING ANTIJAM SYSTEMS	*	0	*	0					0
N MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SAF)	3	3	1	0					*
O MAINTAINING RADOMES	*	1	0	0					*
P MAINTAINING RADAR TRAINERS	1	0	0	0					*
Q INSTALLING, TESTING, AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	(27)	(17)	5	3					*
R PERFORMING RADAR EVALUATION FUNCTIONS	*	1	(23)	0					*

* Denotes less than .5 percent

TABLE 6

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES

	RADAR		QUALITY		PROGRAM		JUNIOR		FIXED		TACTICAL	
	MAINT	SUPV	CONTROL	INSP	MGRS	ACSW	PERS	MAINT	PERS	MAINT	PERS	PERS
NUMBER IN GROUP	96		33		5	67		159		161		
PERCENT OF TOTAL SAMPLE	13%		4%		1%	9%		21%		21%		
PERCENT IN CONUS	67%		58%		40%	87%		76%		60%		
DAFSC DISTRIBUTION (PERCENT)												
30332	2		-		-	48		25		22		
30352	27		12		-	52		66		66		
30372	71		88		100	-		9		12		
AVERAGE GRADE												
AVERAGE MONTHS IN CAREER FIELD	E-6		E-6		E-7	E-3		E-4		E-4		
AVERAGE MONTHS IN SERVICE	157		185		175	25		46		56		
	170		202		216	28		55		64		
PERCENT IN FIRST ENLISTMENT												
PERCENT SUPERVISING	7%		3%		-	91%		70%		65%		
AVERAGE NUMBER OF TASKS PERFORMED	79%		51%		-	10%		34%		35%		
	146		109		44	63		145		230		
JOB DIFFICULTY INDEX (JDI)												
(AVERAGE JDI = 13.00)	13.9		13.5		10.9	9.0		15.1		17.6		
MAJOR COMMAND:												
TAC	52%		64%		40%	66%		76%		54%		
AFCC	17%		-		20%	27%		16%		7%		
USAFE	15%		27%		40%	-		-		33%		
PACAF	7%		9%		-	7%		5%		5%		
OTHER	9%		-		-	-		3%		1%		

TABLE 6 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES

	TACTICAL RADAR CREW		ENGRG INSTL TEAM		RADAR EVAL		JOB CONTROLLERS		INSTR PERS	
	MEMBERS		MEMBERS		PERS					
NUMBER IN GROUP	12		6		26		6		33	
PERCENT OF TOTAL SAMPLE	2%		1%		3%		1%		4%	
PERCENT IN CONUS	75%		100%		89%		83%		100%	
DAFSC DISTRIBUTION (PERCENT)										
30332	75		17		-		-		-	
30352	25		83		38		83		67	
30372	-		-		62		17		33	
AVERAGE GRADE										
AVERAGE MONTHS IN CAREER FIELD	E-3		E-3		E-6		E-4		E-5	
AVERAGE MONTHS IN SERVICE	17		21		151		62		96	
	20		29		172		94		102	
PERCENT IN FIRST ENLISTMENT										
PERCENT SUPERVISING	100%		83%		8%		17%		24%	
AVERAGE NUMBER OF TASKS PERFORMED	-		-		12%		17%		3%	
	93		76		27		13		22	
JOB DIFFICULTY INDEX (JDI)										
(AVERAGE JDI = 13.00)	11.0		11.0		11.6		5.1		10.4	
MAJOR COMMAND:										
TAC	75%		-		15%		66%		3%	
AFCC	-		100%		62%		17%		3%	
USAFE	25		-		8%		17%		-	
PACAF	-		-		-		-		-	
OTHER	-		-		15%		-		94%	

TABLE 7

JOB SATISFACTION INFORMATION FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	RADAR MAINT SUPV (N=96)	QUALITY CONTROL INSP (N=33)	PROGRAM MANAGERS (N=5)	JUNIOR AC&W PERS (N=67)	FIXED RADAR MAINT PERS (N=159)	TACTICAL RADAR MAINT PERS (N=161)
<u>HOW DO YOU FIND YOUR JOB:</u>						
DULL	4	6	20	7	12	4
SO-SO	17	15	0	18	16	10
INTERESTING	78	79	80	75	72	85
<u>HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS:</u>						
VERY LITTLE OR NOT AT ALL	16	9	60	22	14	12
FAIRLY WELL TO PERFECTLY	84	91	40	78	86	88
<u>HOW WELL DOES YOUR JOB UTILIZE YOUR TRAINING:</u>						
VERY LITTLE OR NOT AT ALL	24	21	60	25	16	8
FAIRLY WELL TO PERFECTLY	76	79	40	75	84	92
<u>HOW SATISFIED ARE YOU WITH THE SENSE OF ACCOMPLISHMENT GAINED FROM YOUR JOB:</u>						
DISSATISFIED	21	24	60	16	14	14
UNDECIDED	8	3	40	18	9	9
SATISFIED	71	73	0	66	77	76
<u>DO YOU PLAN TO REENLIST:</u>						
NO, WILL PROBABLY RETIRE		19	24	80	0	2
NO, OR PROBABLY NO	17	12	20	51	44	35
YES, OR PROBABLY YES	64	64	0	49	54	63

* Columns may not add to 100 percent due to "no response" or rounding

TABLE 7 (CONTINUED)

**JOB SATISFACTION INFORMATION FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)**

	TACTICAL RADAR CREW MEMBERS (N=12)	ENGRG INSTL TEAM MEMBERS (N=6)	RADAR EVAL PERS (N=26)	JOB CONTROLLERS (N=6)	INSTR PERS (N=33)
HOW DO YOU FIND YOUR JOB:					
DULL	8	0	23	17	0
SO-SO	8	0	23	33	9
INTERESTING	83	100	(54)	(33)	91
HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS:					
VERY LITTLE OR NOT AT ALL	25	67	38	33	6
FAIRLY WELL TO PERFECTLY	75	(33)	(62)	(50)	94
HOW WELL DOES YOUR JOB UTILIZE YOUR TRAINING:					
VERY LITTLE OR NOT AT ALL	17	83	38	67	18
FAIRLY WELL TO PERFECTLY	83	(17)	(62)	(17)	82
HOW SATISFIED ARE YOU WITH THE SENSE OF ACCOMPLISHMENT GAINED FROM YOUR JOB:					
DISSATISFIED	17	-	31	33	6
UNDECIDED	8	33	11	0	9
SATISFIED	75	67	(58)	(50)	85
DO YOU PLAN TO REENLIST:					
NO, WILL PROBABLY RETIRE	0	0	23	0	3
NO, OR PROBABLY NO	50	67	23	33	33
YES, OR PROBABLY YES	50	(33)	54	67	64

* Columns may not add to 100 percent due to "no response" or rounding

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational analysis. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information can be used to evaluate how well career ladder documents, such as AFR 39-1, Specialty Descriptions, and the Specialty Training Standards (STS), reflect what career ladder personnel are actually doing in the field.

A comparison of duty and task performance between 3-skill level (30332) personnel and 5-skill level (30352) personnel indicates the jobs they perform are essentially the same. Therefore, they are discussed as one group (30332/30352) in the skill level analysis that follows. The analysis will discuss tasks common to each of the DAFSC groups, as well as the tasks which best differentiate the 3-, 5-, and 7-skill level incumbents.

Skill Level Comparisons

As in most career ladders, the job performed by the 3- and 5-skill level personnel is largely technical in nature. These personnel spend 71 percent of their job time performing technical duties, with the largest amount of time (17 percent) spent on performing general and preventive maintenance (see Table 8). This is realistic with the career ladder structure, since a majority (64 percent) of the 30332 and 30352 personnel fall into the three major radar maintenance clusters (see Table 9). Table 10 reflects those tasks performed by the highest percentages of 3- and 5-skill level personnel. Those tasks primarily involve routine radar maintenance, such as removing or replacing cables, electronic components, circuit boards, and cooling fluids; performing various system operational checks; and adjusting circuits.

The duties and tasks performed by 7-skill level personnel indicate that these incumbents are the first-line supervisors and workcenter chiefs of this career ladder. Table 8 reflects these incumbents spend 50 percent of their job time performing supervisory duties and another 20 percent performing administrative activities. An examination of the most common tasks performed by these personnel (see Table 11) reveals that over 45 percent are performing supervisory tasks such as preparing APRs, orienting and counseling personnel, maintain training records, inspecting personnel and equipment, and establishing work schedules.

When comparing the two skill level groups, data reveal 7-skill level incumbents spend substantially more time in supervisory duties and are represented much more in the supervisory and management job types. Table 12 lists the tasks which best differentiate the 3-/5-, and 7-skill level personnel. As expected, these differentiating tasks indicate that, although the 7-skill level personnel spend just over 21 percent of their job time on radar maintenance duties, they have a much greater management, supervisory, and administrative responsibility than the 3-, 5-skill level group.

AFR 39-1 Specialty Descriptions

The foregoing 3-, 5-, and 7-skill level survey data were compared to the AFR 39-1 Specialty Descriptions for the Aircraft Control and Warning Radar Specialist (AFSC 30312/30332/30352), and the Aircraft Control and Warning Radar Technician (AFSC 30372), dated 1 January 1982. These descriptions are intended to give a broad overview of the duties and tasks performed by each skill level of the career ladder. These descriptions appeared complete and accurately reflected the range of duties and responsibilities of the career ladder at the time of the occupational survey.

TABLE 8

RELATIVE TIME SPENT ON DUTIES BY 303X2 DAFSC GROUPS

DUTIES	30332/52 PERSONNEL (N=555)	30372 PERSONNEL (N=207)
A ORGANIZING AND PLANNING	4	11
B DIRECTING AND IMPLEMENTING	4	12
C EVALUATING AND INSPECTING	5	17
D TRAINING	6	10
E PERFORMING ADMINISTRATIVE TASKS	10	20
F PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	6	9
G PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	17	4
H MAINTAINING RADAR TRANSMITTER SYSTEMS	10	3
I MAINTAINING ANTENNA SYSTEMS	4	1
J MAINTAINING WAVE-GUIDE SYSTEMS	2	1
K MAINTAINING RADAR RECEIVERS AND TIMING SYSTEMS	10	3
L MAINTAINING INDICATORS OR VIDEO MAPPERS	8	2
M MAINTAINING ANTIJAM SYSTEMS	1	*
N MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	4	1
O MAINTAINING RADOMES	*	*
P MAINTAINING RADAR TRAINERS	1	*
Q INSTALLING, TESTING, AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	7	4
R PERFORMING RADAR EVALUATION FUNCTIONS	1	1

* Denotes less than 1 percent

TABLE 9

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER
CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

JOB GROUP	DAFSC 30332/52 (N=555)	DAFSC 30372 (N=207)
I. RADAR MAINTENANCE SUPERVISORS (N=96)	5	33
II. QUALITY CONTROL INSPECTORS (N=33)	*	14
III. PROGRAM MANAGERS (N=5)	0	2
IV. JUNIOR AC&W RADAR PERSONNEL (N=67)	12	0
V. FIXED RADAR MAINTENANCE PERSONNEL (N=159)	26	7
VI. TACTICAL RADAR MAINTENANCE PERSONNEL (N=161)	26	9
VII. TACTICAL RADAR CREW MEMBERS (N=12)	2	0
VIII. ENGINEERING INSTALLATION TEAM MEMBERS (N=6)	1	0
IX. RADAR EVALUATION PERSONNEL (N=26)	2	8
X. JOB CONTROLLERS (N=6)	1	1
XI. INSTRUCTOR PERSONNEL (N=33)	3	9
PERCENT NOT GROUPED	22	17
TOTAL	100	100

* Denotes less than 1 percent

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30332/52 PERSONNEL
(N=555)

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	76
G359 PERFORM CORROSION CONTROL	72
G372 REMOVE OR REPLACE CABLES	71
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	71
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	70
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	69
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	66
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	66
G349 FABRICATE COAXIAL CABLES	65
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	65
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	62
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	60
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	59
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	58
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	57
L557 ADJUST RANGE MARK CIRCUITS	56
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	55
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	55
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	55
G379 TERMINATE CABLES	53
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	52
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	51
L559 ADJUST SWEEP GENERATING CIRCUITS	51
L552 ADJUST CURSOR CIRCUITS	50
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	50
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	50
G380 TEST INTERLOCK CIRCUITS	50
G375 REMOVE OR REPLACE ELECTRONIC CHASSIS	50
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	49
G365 PERFORM INTERLOCK PROTECTIVE CIRCUIT OPERATIONAL CHECKS	48

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30372 PERSONNEL
(N=207)

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, CONFERENCES, OR WORKSHOPS	79
B84 WRITE CORRESPONDENCE OR MESSAGES	68
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	64
C134 PERFORM SELF-INSPECTIONS	64
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	60
C140 WRITE APR	59
A8 DETERMINE WORK PRIORITIES	57
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	57
B77 ORIENT NEWLY ASSIGNED PERSONNEL	55
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	53
F312 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	52
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	49
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	49
C138 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	49
E267 REVIEW CORRESPONDENCE	48
C142 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	48
C127 PERFORM EQUIPMENT INSPECTIONS	47
E225 MAKE ENTRIES ON AF FORMS 2419 (ROUTING AND REVIEW OF QUALITY CONTROL REPORTS)	47
B75 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	47
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	47
B80 SUPERVISE AC&W RADAR SPECIALISTS (AFSC 30352)	46
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	46
A42 SCHEDULE LEAVES OR PASSES	45
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	45
A26 ESTABLISH WORK SCHEDULES	45
F332 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	45
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	44
E271 REVIEW MAINTENANCE OR INSPECTION REPORTS	44
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	44
F335 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	44

TABLE 12

TASKS WHICH BEST DIFFERENTIATE DAFSC 30332, 35252, AND 30372 PERSONNEL

TASKS	30332/52 PERSONNEL (N=555)	30372 PERSONNEL (N=207)	DIFFERENCE
PERFORM CORROSION CONTROL	72	25	+47
PERFORM GENERAL SOLDERING	71	26	+45
REMOVE OR REPLACE DISCRETE ELECTRONIC CIRCUITS	70	27	+43
PERFORM POWER SUPPLY OPERATIONAL CHECKS	66	25	+41
LUBRICATE ANTENNA SYSTEM COMPONENTS	59	20	+39
REMOVE OR REPLACE CIRCUIT BOARDS OR CORDS	59	23	+36
PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	63	27	+36
ADJUST SWEEP GENERATING CIRCUITS	51	16	+35
PERFORM FACILITIES MAINTENANCE	57	23	+34
PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	55	22	+33
ADJUST TRANSMITTER POWER SUPPLIES	46	17	+29
ADJUST VIDEO AMPLIFIER CIRCUITS	41	14	+27

ANALYZE TRENDS IN SYSTEM MALFUNCTIONS	11	39	-28
REVIEW SUPPLY OR EQUIPMENT INVENTORIES	10	39	-29
EVALUATE TECHNICAL PERFORMANCE OF PERSONNEL	10	40	-30
SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	10	42	-32
INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	15	49	-34
ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	11	46	-35
REVIEW MAINTENANCE OR INSPECTION REPORTS	9	45	-36
PERFORM SELF-INSPECTIONS	26	64	-38
WRITE APRs	20	59	-39
WRITE CORRESPONDENCE OR MESSAGES	14	68	-54

ANALYSIS OF EXPERIENCE GROUPS

In addition to the skill level analysis, survey respondents were examined on the basis of months of Total Active Federal Military Service (TAFMS). This analysis helps to determine how jobs and job perceptions change over time, and can help describe the types of jobs or duties more junior 303X2 personnel can look forward to performing in the future.

As expected, no major deviations from the usual pattern of increasing time spent on supervisory duties with increasing months TAFMS were noted (see Table 13). Generally, junior airmen spend more time performing technical radar maintenance functions, such as performing preventive maintenance or maintaining transmitter systems, while senior incumbents spend more time on directing and implementing or inspecting and evaluating duties.

Job Satisfaction Analysis

Job satisfaction indices for personnel in the first enlistment (1-48 months TAFMS), second enlistment (49-96 months TAFMS), and career (97+ months TAFMS) groups were also examined. Job interest, perceived utilization of talents or training, and reenlistment intentions are presented in Table 14, along with the comparative sample for personnel from all related career ladders analyzed in 1984. (The comparative sample included the 321X2, 322X2, 328X2/3/4, 404X1, 432X0/2/4, 427X5, and 461X0 career ladders.) When compared to the comparative sample, 303X2 first-enlistment personnel generally have about the same job satisfaction indicators (a somewhat higher percentage of 303X2 personnel feel their talents are being utilized at least fairly well). DAFSC 303X2 second-enlistment personnel are also somewhat like their comparative sample group, and very similar to the 303X2 first-enlistment personnel, except in the area of reenlistment plans. Sixty-seven percent of the 303X2 second-enlistment group plans to reenlist, which is much more favorable than the 303X2 first-enlistment group, but less than the 49-96 months TAFMS comparative sample. Finally, career 303X2 personnel (97+ months TAFMS) indicate a slightly to somewhat lower feeling of job satisfaction than their comparative sample in all indicators.

First-Enlistment Personnel

First-enlistment personnel were also examined both on the basis of common tasks performed and various background information. Table 15 lists those tasks performed by the greatest percentages of 303X2 first-enlistment personnel. Generally, these most common tasks involve some aspect of general or preventive maintenance, such as corrosion control, performing general soldering, fabricating coaxial cable, and performing operational checks and adjustments on a variety of devices or circuits.

Although the tasks listed in Table 15 are characteristic of most first-enlistment personnel, other functions performed by these incumbents vary somewhat, depending on the job they perform. Figure 2 presents the distribution of 303X2 first-enlistment personnel across job groups identified in the CAREER LADDER STRUCTURE section. As expected, almost 70 percent of first-enlistment personnel are identified in either the Fixed or Tactical Radar Maintenance

clusters or the Junior AC&W Radar Maintenance cluster. Tasks typically performed by first-enlistment personnel in the major job groups on Figure 2 include:

Fixed Radar Maintenance Personnel (28%)

- adjust crystal mixers
- remove or replace crystal mixer components
- adjust power supplies other than solid-state power supplies
- adjust angle mark circuits

Tactical Radar Maintenance Personnel (26%)

- adjust side lobe receiver circuits
- remove or replace digital receiver circuits components
- adjust defruiters
- erect mobile antennas

Junior AC&W Radar Personnel (15%)

- adjust range mark circuits
- perform corrosion control
- adjust range strobe circuits
- perform power supply operational checks

Tactical Radar Crew Members (3%)

- tear down mobile antennas
- assemble or disassemble mobile radar equipment for mission deployments
- adjust digital MTI antennas
- erect support facilities, such as transportable shelters

Instructor Personnel (2%)

- administer or score tests
- conduct technical school classroom training
- prepare lesson plans
- write test questions

Radar Maintenance Supervisors (2%)

- determine work priorities
- initiate follow-up action on work in progress
- orient newly assigned personnel
- participate in meetings, such as staff meetings, briefings, conferences or workshops

In addition to an analysis of tasks, various pieces of radar equipment maintained by first-enlistment personnel were examined. Table 16 reveals that the radar system most likely to be maintained by 303X2 first-enlistment personnel is the mobile, three-dimensional, solid-state radar, TPS-43E. Table 16 also reveals that a larger percentage of these personnel are assigned to maintaining the newer solid-state devices.

PACAF

This relatively small group (only 4 percent of the sample) is distinguished by several tasks its members perform. Incumbents spend 10 percent of their job time maintaining indicators of video mappers, performing tasks such as isolating range mark or sweep generating circuit malfunctions, and adjusting time-sharing circuits. The primary radars maintained by PACAF personnel are the TPS-43E and MPS-11.

AFCC

AFCC personnel make up 21 percent of the survey sample (161 respondents) and perform a job much smaller than the previously discussed commands, performing an average of only 80 tasks. AFCC personnel spend somewhat more time performing supervisory duties than personnel assigned to TAC, USAFE, or PACAF. Although they perform tasks from all maintenance duties, there is only one inventory task performed by more than 50 percent of these personnel; that is, "perform general housekeeping procedures". There are no tasks differentiating this group, however, a larger percent of these personnel are maintaining the older tube-type equipment. AFCC personnel are the least satisfied of the MAJCOM groups, with only 62 percent perceiving their training is being utilized at least fairly well, and only 47 percent planning to reenlist.

ATC

The 303X2 personnel assigned to ATC are primarily responsible for conducting the various aspects of AC&W radar resident classroom training at Keesler AFB MS. These personnel perform a relatively low number of tasks (41), a majority of which deal directly with resident training responsibility. Typical tasks performed by ATC incumbents include writing test questions, administering or scoring tests, preparing lesson plans, and conducting technical school classroom training. While not the most experienced in TAFMS, the ATC group has the least number of first-term personnel assigned (17 percent).

ANALYSIS OF MAJOR COMMAND DIFFERENCES

An analysis of the tasks and duties performed by MAJCOM groups can highlight important differences. In many specialties, the jobs performed by various groups of personnel differ little across MAJCOMs; however, there are some noticeable differences in the 303X2 career ladder. This analysis examined data relating to personnel assigned to TAC, USAFE, PACAF, AFCC, and ATC. These commands account for 98 percent of the survey respondents.

Given below are brief job descriptions concerning these users of 303X2 personnel. In addition, four tables at end of this section provide job and background information for the five commands mentioned above. Table 21 reveals the difference in relative time spent performing duties across commands, while Table 22 lists tasks that reflect both similarities and differences in percent members performing by MAJCOM groups. Various types of background information are listed in Tables 23 and 24, such as number of tasks performed, experience levels, and differences in equipment maintained.

TAC

These 401 incumbents constitute 52 percent of the survey sample. Of the three commands found in the CONUS, the TAC personnel have the largest job (an average of 130 tasks performed). This group spends 16 percent of its job time performing general and preventive maintenance, and 20 percent maintaining transmitter and receiver systems (4 to 18 percent more than the other commands). TAC has the largest percent of first-enlistment personnel (59 percent) and 77 percent of this group hold a 3- or 5-skill level DAFSC. No differentiating tasks are performed by TAC personnel--they perform a job very similar to that of USAFE and PACAF groups. Like those two commands, the mobile TPS-43E radar and related devices constitute the system most likely to be maintained by TAC personnel.

USAFE

The 107 personnel (14 percent of the sample) assigned to USAFE stand out due to the large amount of job time (15 percent) they spend performing radar site and mobility functions. These duties define an overseas mobile AC&W radar mission. Differentiating tasks include erecting or tearing down mobile antennas, erecting tents, installing or removing SIF antennas, establishing security at mission locations, and living under field conditions. Seventy percent of these personnel are maintaining the TPS-43E AC&W radar and have the largest job of all commands (an average of 173 tasks performed).

TABLE 20

EXAMPLES OF TASKS NOT REFERENCED TO POI 30332 WITH PROBABILITY
OF FIRST-ENLISTMENT PERFORMANCE GREATER THAN 30 PERCENT

TASKS	PERCENT MEMBERS PERFORMING			TNG EMP*	TASK DIFF**
	FIRST JOB (N=240)	FIRST			
		ENL (N=395)			
G363 PERFORM HIGH RELIABILITY SOLDERING ON PRINTED CIRCUIT BOARDS	38	42	5.99	6.25	
H384 ADJUST MODULATOR PROTECTOR CIRCUITS	34	34	5.48	4.97	
K492 ADJUST INTERMEDIATE FREQUENCY (IF) PREAMPLIFIERS	32	36	5.10	5.67	
K422 REMOVE OR REPLACE TRANSMITTER POWER OUTPUT TUBES	38	42	5.07	6.19	
H423 REMOVE OR REPLACE TRANSMITTER POWER SUPPLY COMPONENTS	38	42	4.67	4.94	
I426 ADJUST ANTENNA CONTROL SYSTEMS	32	33	4.55	5.40	
I438 LEVEL ANTENNA PEDESTALS	40	44	4.48	5.18	
H425 REMOVE OR REPLACE TRANSMITTER PULSE TRANSFORMERS	35	40	4.48	6.39	
K495 ADJUST RECEIVER RF AMPLIFIERS	30	30	4.48	5.89	
L570 ISOLATE SWEEP GENERATING CIRCUIT MALFUNCTIONS	32	38	4.44	5.70	
L568 ISOLATE RANGE MARK CIRCUIT MALFUNCTIONS	37	42	4.34	5.11	
I429 ADJUST ANTENNA TILT	31	36	4.26	5.65	
L566 ISOLATE CURSOR CIRCUIT MALFUNCTIONS	31	35	4.19	5.73	
L565 ISOLATE CRT PROTECTION CIRCUIT MALFUNCTIONS	28	35	4.07	5.64	

* Mean TE = 2.30, SD = 1.72

** Mean TD = 5.00, SD = 1.00

TABLE 19

EXAMPLES OF TASKS NOT REFERENCED TO STS PERFORMED BY 303X2 PERSONNEL
(OVER 20 PERCENT MEMBERS PERFORMING)

TASKS	1ST ENL (N=395)	DAFSC 30372 (N=207)	TNG EMP*	TASK DIFF**
Q782 TEAR DOWN MOBILE ANTENNAS	30	14	3.30	5.52
D300 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	40	34	3.01	2.79
F304 MAINTAIN BENCHSTOCK LEVELS	24	14	3.00	3.01
Q785 TEAR DOWN, INSPECT, CLEAN, AND REASSEMBLE M-16 RIFLES	27	21	2.51	4.00
Q766 PACK INDIVIDUAL MOBILITY EQUIPMENT FOR DEPLOYMENTS	22	14	2.31	4.51
F334 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	22	41	2.14	3.62
F335 DREVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	9	45	1.81	3.80
F332 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	5	45	1.59	4.01

* MEAN TE = 2.30, SD = 1.72

** MEAN TD = 5.00, SD = 1.00

TABLE 18

LOW PERFORMANCE OR UNREFERENCED 303X2 STS ELEMENTS
(EXCLUDING KNOWLEDGE ONLY ELEMENTS)

<u>STS ELEMENTS</u>		<u>PERCENT PERFORMING*</u>
14c	REPAIR DEFECTIVE PARTS	NO MATCH
14e	REPAIR CABLES	NO MATCH
15b(2)	DEPLOYMENT EQUIPMENT - AIR	15
15c(4)	ORIENT ANTENNA	18
15c(5)	INTERFACE RADAR WITH ASSOCIATE EQUIPMENT	NO MATCH
15c(6)	ACCOMPLISH PRE-OPERATIONAL CHECKS	17

* Percent shown is the highest percent reported for a task matched to the STS element

POI blocks and objectives are well supported by survey data based on percentages of first-enlistment personnel performing tasks or with considerations given to TE and TD ratings calculated for those tasks.

A review of tasks not referenced to the POI identified over 50 tasks, performed by more than 30 percent of the first-enlistment AC&W radar personnel. Forty of these tasks had high TE ratings, indicating some form of structured training of those tasks is appropriate. Table 20 lists several of these tasks. Some of the tasks received low task difficulty ratings, so may not be good items for resident training. Others, such as those involving soldering techniques, may already be taught in special training courses. Additionally, certain of these nonreferenced tasks may not be suitable for entry level training due to limited facilities or training equipment costs. Nevertheless, subject-matter specialists and training personnel should review and evaluate the entire list of nonreferenced tasks, found in the TRAINING EXTRACT accompanying this report, to determine if POI revisions are necessary.

Because the TE and TD ratings are the composite opinion of experienced career ladder personnel on training for a 1-48 TAFMS person, such data can assist training developers in deciding what tasks should be emphasized in entry-level training. Tasks receiving high ratings on both task factors accompanied by moderate to high personnel performing percentages may warrant resident training. Those tasks receiving high task factor ratings, but low personnel performing percentages, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best left out of training for new 303X2 personnel, but this decision must be weighed against percent performing data, command concerns, and criticality of the task to readiness, contingency planning, or safety programs.

Specialty Training Standard (STS)

A comprehensive review of STS 303X2, dated August 1982, compared STS items to survey data. STS paragraphs containing general information or subject-matter-knowledge requirements were not evaluated. Overall, the technical elements of the STS with tasks referenced to them generally were well supported in terms of being performed by substantial percentages of 303X2 reference groups. All but a few elements were performed by at least 20 percent of the respondents in their first-enlistment, or at the 5- or 7-skill levels. Technical elements which reflected low percent members performing (less than 20 percent) or were without matched tasks are listed in Table 18. These elements should be reviewed by career ladder managers to determine the appropriateness of their inclusion in the STS. These elements may not have been matched because inventory tasks relative to that item were unclear or omitted. If it is determined tasks were unclear or omitted, it is requested that subject-matter specialists draft the necessary task statements and forward them to USAFOMC/OMYV for inclusion in the next inventory constructed for this specialty.

A number of job inventory tasks were not matched to STS elements. For the most part, these tasks not referenced involved supervision and management duties. There were, however, several tasks pertaining to supply and equipment duties, and to mobile radar activities which were performed by more than 20 percent of the personnel in at least one of the referenced groups. These tasks are listed in Table 19. Such tasks not referenced should be covered by some existing element or a new item should be added to the STS.

Plan of Instruction (POI) (E3ABR30332)

Based on the previously mentioned assistance from technical school subject-matter specialists in matching inventory tasks to the E3ABR30332, POI, dated June 1983, a computer product was generated displaying the results of the matching process. Information furnished for consideration includes percent members performing data for first-job and first-enlistment personnel and secondary factor TE and TD ratings.

TABLE 17

TASKS RATED HIGHEST IN TRAINING EMPHASIS FOR 303X2 PERSONNEL

TASKS	TNG EMP	PERCENT MEMBERS PERFORMING		TASK DIFF
		1ST JOB (N=240)	1ST ENL (N=395)	
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	6.78	67.9	68.4	5.64
K529 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING CONVENTIONAL TEST EQUIPMENT	6.33	46.2	46.1	5.86
*G363 PERFORM HIGH RELIABILITY SOLDERING ON PRINTED CIRCUIT BOARDS	5.99	38.3	41.8	6.25
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	5.99	65.8	66.1	4.25
*G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	5.97	75.0	75.7	3.70
H393 ADJUST TRANSMITTER POWER SUPPLIES	5.74	48.3	48.6	4.92
H398 ISOLATE MODULATOR MALFUNCTIONS	5.71	38.7	42.5	6.55
H406 ISOLATE TRANSMITTER POWER SUPPLY MALFUNCTIONS	5.71	37.9	44.1	5.89
K528 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING BUILT-IN TEST EQUIPMENT (BITE)	5.70	32.5	32.2	4.84
*G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	5.69	75.0	74.4	4.09
G355 ISOLATE INTERLOCK PROTECTIVE CIRCUIT MALFUNCTIONS	5.66	44.6	48.4	5.19
H407 ISOLATE TRANSMITTER PROTECTIVE CIRCUIT MALFUNCTIONS	5.64	28.3	33.7	5.70
H400 ISOLATE POWER OUTPUT CIRCUIT MALFUNCTIONS	5.62	31.3	36.7	6.08
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	5.59	76.2	73.2	4.38
H383 ADJUST MODULATOR CONTROL CIRCUITS	5.59	41.7	42.5	5.08
K530 PERFORM SIGNAL DISTRIBUTION SYSTEM OPERATIONAL CHECKS	5.59	28.7	30.4	4.85
G358 ISOLATE SOLID-STATE POWER SUPPLY MALFUNCTIONS	5.55	34.2	38.7	6.01
*G377 REMOVE OR REPLACE SOLID-STATE DEVICES	5.52	54.2	54.2	4.81
G356 ISOLATE POWER DISTRIBUTION SYSTEM MALFUNCTIONS	5.51	38.7	44.8	5.47

* Indicates tasks not matched to POI 3ABR30332

MEAN TE = 2.30, SD = 1.72

MEAN TD = 5.00, SD = 1.00

TRAINING ANALYSIS

Occupational survey data are one of the many sources of information which can be used to assist training managers in the development of training programs relevant to the needs of personnel working in their first assignments in a career ladder. Factors which may be used to evaluate training are, primarily, the percent first-job (1-24 months TAFMS) or first-enlistment (1-48 months TAFMS) members performing tasks, and secondarily, considerations such as training emphasis and task difficulty ratings, mission criticality of tasks, or availability of training equipment or instructors. Percent members performing (PMP) 303X2 tasks, and training emphasis and task difficulty factors were used in evaluating the Specialty Training Standard (STS) and the Plan of Instruction (POI) for the 303X2 career ladder. Training personnel from the 3300 Technical Training Wing, Keesler AFB MS, matched inventory tasks to appropriate sections of the POI and STS. It was this matching upon which comparisons were based. A complete computer listing displaying the percent members performing, training emphasis ratings, and task difficulty ratings for each task statement, along with POI and STS matchings, was forwarded to the school for their use in any further detailed review of training documents. A summary of that information is described below.

Training Emphasis and Task Difficulty Data

As discussed in the Task Factor Administration section, training emphasis (TE) and task difficulty (TD) data can be used to provide information on training needs as perceived by experienced technicians within the specialty. This information, when used in support of percent members performing, can aid training managers in determining if STS or POI adjustments or revisions are needed.

Table 17 lists the top 20 tasks which 73 senior 303X2 technicians indicated as requiring the highest TE. While the percentages of first-enlistment personnel performing these tasks are not high (only six tasks are performed by 50 percent or above), every task is performed by at least 30 percent of the first-termers. This suggests that these tasks, on the whole, are deserving of some form of common structured training.

Further review of Table 17 reflects that all but 4 of the 20 tasks were matched to the 3ABR30332 POI, indicating the majority of these high TE tasks are taught in resident technical training. The four tasks not matched to the POI relate to soldering techniques and the removal and replacement of components, or solid-state devices. These tasks generally are inherent to all communications-electronics career ladders and will be learned at base level through on-the-job training (OJT), field, or mobile training, which supports their omission from the resident training course. In addition, three of these four tasks received below average TD ratings (i.e., the task is easy to learn) so may not be most efficiently taught in resident technical training.

TABLE 16

TYPES OF RADAR EQUIPMENT MAINTAINED BY FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)

<u>RADAR EQUIPMENT*</u>	<u>PERCENT MAINTAINING (N=395)</u>
UPA-62C RADAR INDICATOR (SS)	44
UPX-23 INTERROGATOR SYSTEM (SS)	37
TPS-43E RADAR SYSTEM (SS)	36
GPS-13A DEFRUITER (SS)	28
UPX-14 INTERROGATOR SET (TT)	24
UPA-59A DECODER (SS)	23
GPA-127 RADAR INDICATOR (TT)	21
GPA-122 CODER-DECODER (SS)	16
TSQ-61 OPERATIONS CENTRAL (SS)	17
TM-1 RADAR TRAINER (SS)	16
UPA_59 DECODER (SS)	15
GPS-T4 RADAR TARGET SIMULATOR (TT)	13
OA-929 RADAR INDICATOR (TT)	13
FPS-91 RADAR SYSTEM (TT)	11
AM-1796 DELAY LINE SET (TT)	11
GPS-T2 RADAR TRAINER (TT)	10
MPS-11 RADAR SYSTEM (SS)	9

* SS = Newer solid-state equipment
TT = Older tube-type equipment

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
(1-48 MONTHS) TAFMS PERSONNEL

TASKS	FIRST ENLISTMENT PERSONNEL (N=395)
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	81
G359 PERFORM CORROSION CONTROL	77
G372 REMOVE OR REPLACE CABLES	76
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	75
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	74
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD	73
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	71
G349 FABRICATE COAXIAL CABLES	70
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	69
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	68
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	66
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	64
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	64
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	63
L557 ADJUST RANGE MARK CIRCUITS	62
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	61
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	60
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	59
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	58
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	54
G379 TERMINATE CABLES	54
L552 ADJUST CURSOR CIRCUITS	54
L559 ADJUST SWEEP GENERATING CIRCUITS	54
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	54
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	53
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	53
G380 TEST INTERLOCK CIRCUITS	52
L551 ADJUST CRT PROTECTION CIRCUITS	50
G365 PERFORM INTERLOCK PROTECTIVE CIRCUIT OPERATIONAL CHECKS	49
H417 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM COMPONENTS	49

TABLE 14

**JOB SATISFACTION INFORMATION FOR 303X2 AND COMPARATIVE
SAMPLE* TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)**

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	COMP		COMP		COMP	
	303X2 (N=395)	SAMPLE (N=7,891)	303X2 (N=78)	SAMPLE (N=3,015)	303X2 (N=287)	SAMPLE (N=3,790)
HOW DO YOU FIND YOUR JOB:						
DULL	12	11	13	12	14	9
SO-SO	15	17	19	18	16	17
INTERESTING	73	72	67	70	70	74
HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS:						
LITTLE OR NOT AT ALL	17	23	17	23	21	19
FAIRLY WELL TO PERFECTLY	83	77	82	77	79	81
HOW WELL DOES YOUR JOB UTILIZE YOUR TRAINING:						
VERY LITTLE OR NOT AT ALL	22	21	17	22	27	21
FAIRLY WELL TO PERFECTLY	78	79	81	78	73	79
DO YOU PLAN TO REENLIST:						
NO, WILL PROBABLY RETIRE	-	-	-	-	19	15
NO, OR PROBABLY NO	45	41	32	26	14	9
YES, OR PROBABLY YES	55	59	67	74	67	76

* Includes personnel in AFSCs 321X2, 322X2, 328X2/3/4, 404X1, 432X0/2/4, 427X5, and 461X0

NOTE: Columns may not add up to 100 percent due to rounding or nonresponses

TABLE 13

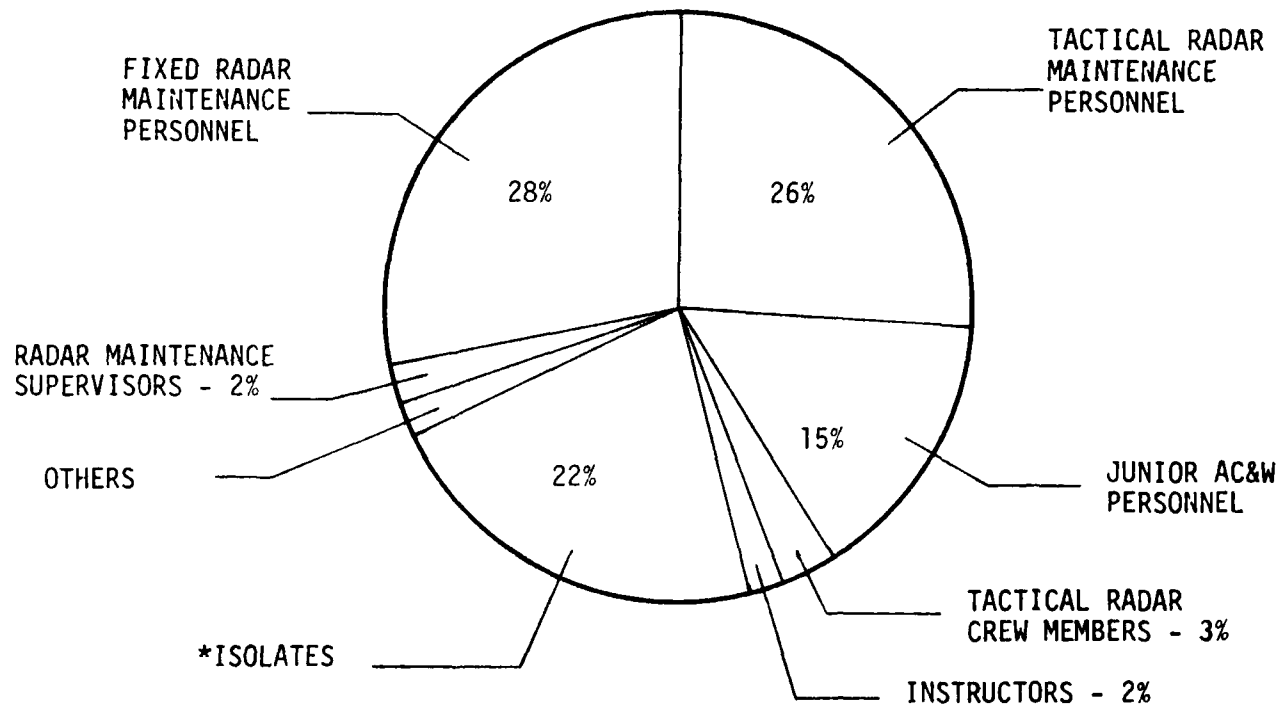
RELATIVE PERCENT TIME SPENT ON DUTIES
BY 303X2 TAFMS GROUPS

DUTIES	MONTHS TAFMS		
	1-48 (N=395)	49-96 (N=78)	97+ (N=287)
A ORGANIZING AND PLANNING	3	6	10
B DIRECTING AND IMPLEMENTING	2	7	11
C EVALUATING AND INSPECTING	4	8	14
D TRAINING	3	14	10
E PERFORMING ADMINISTRATIVE TASKS	9	13	18
F PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	6	6	8
G PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	20	11	6
H MAINTAINING RADAR TRANSMITTER SYSTEMS	11	6	4
I MAINTAINING ANTENNA SYSTEMS	4	3	1
J MAINTAINING WAVE-GUIDE SYSTEMS	3	2	1
K MAINTAINING RADAR RECEIVERS AND TIMING SYSTEMS	11	7	4
L MAINTAINING INDICATORS OR VIDEO MAPPERS	10	6	3
M MAINTAINING ANTIJAM SYSTEMS	1	1	*
N MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	4	3	2
O MAINTAINING RADOMES	*	1	*
P MAINTAINING RADAR TRAINERS	1	1	1
Q INSTALLING, TESTING, AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	7	5	5
R PERFORMING RADAR EVALUATION FUNCTIONS	*	1	2

* Denotes less than 1 percent

FIGURE 2

DISTRIBUTION OF 303X2 FIRST-ENLISTMENT PERSONNEL
ACROSS CAREER LADDER JOBS
(Percent Members Responding)
(N=395)



* DID NOT GROUP WITH ANY MAJOR JOB

TABLE 21

RELATIVE PERCENT TIME SPENT ON DUTIES BY 303X2 MAJOR COMMAND GROUPS

DUTIES	TAC (N=401)	USAF (N=107)	PACAF (N=34)	AFCC (N=161)	ATC (N=42)
A ORGANIZING AND PLANNING	5	5	5	10	6
B DIRECTING AND IMPLEMENTING	5	6	5	8	8
C EVALUATING AND INSPECTING	8	9	8	9	7
D TRAINING	3	3	3	6	(60)
E PERFORMING ADMINISTRATIVE TASKS	13	15	12	12	9
F PERFORMING SUPPLY AND EQUIPMENT FUNCTIONS	7	8	9	6	3
G PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	(16)	10	13	13	3
H MAINTAINING RADAR TRANSMITTER SYSTEMS	(10)	7	8	6	1
I MAINTAINING ANTENNA SYSTEMS	3	2	3	4	*
J MAINTAINING WAVE-GUIDE SYSTEMS	2	2	2	2	*
K MAINTAINING RADAR RECEIVERS AND TIMING SYSTEMS	(10)	6	8	7	1
L MAINTAINING INDICATORS OR VIDEO MAPPERS	8	5	(10)	7	1
M MAINTAINING ANTIJAM SYSTEMS	*	1	*	1	*
N MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	4	4	5	2	1
O MAINTAINING RADOMES	*	*	*	*	0
P MAINTAINING RADAR TRAINERS	1	2	2	1	*
Q INSTALLING, TESTING, AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	5	(15)	7	3	*
R PERFORMING RADAR EVALUATION FUNCTIONS	*	*	*	3	*

* Denotes less than 1 percent

TABLE 22

REPRESENTATIVE TASKS THAT BEST DIFFERENTIATE 303X2 MAJCOM GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	TAC (N=401)	USAF (N=107)	PACAF (N=34)	AFCC (N=161)	ATC (N=42)
REMOVE OR REPLACE ELECTRONIC COMPONENTS	69	64	82	40	5
REMOVE OR REPLACE SOLID-STATE DEVICES	49	63	62	30	5
LUBRICATE ANTENNA SYSTEM COMPONENTS	56	64	71	28	0
PERFORM PPI OPERATIONAL CHECKS	49	57	62	29	5
PERFORM CORROSION CONTROL INSPECTIONS	40	41	74	25	7
REVIEW STATUS OF AWAITING MAINTENANCE PARTS	29	45	65	24	7
REVIEW DUE IN FROM MAINTENANCE (DIFM) RUNS	13	24	53	12	5
ISOLATE TRANSMITTER POWER SUPPLY MALFUNCTIONS	45	44	47	24	5
ADJUST VIDEO AMPLIFIERS	37	39	44	20	5
REMOVE OR REPLACE WAVE-GUIDE SECTION	40	59	50	19	0
DEPRESSURIZE SF6 TANKS	27	62	32	8	
ADJUST MTI RECEIVERS	23	55	21	11	2
LOAD CODES IN KIR-1A COMPUTERS	22	52	21	9	0
ERECT TENTS	21	75	26	1	0
ERECT MOBILE ANTENNAS	24	67	26	1	0
PERFORM PERSONAL HYGIENE TECHNIQUES UNDER FIELD CONDITIONS	18	64	24	1	2
INSTALL OR REMOVE SIP ANTENNAS	22	55	26	6	2
ISOLATE RANGE MARK CIRCUIT MALFUNCTIONS	46	40	65	31	0
ISOLATE SWEEP GENERATING CIRCUIT MALFUNCTIONS	41	42	65	24	0
ADJUST TIME-SHARING CIRCUITS	29	33	59	23	0
ADMINISTER SCORE TESTS	3	7	3	4	95
PREPARE LESSON PLANS	5	5	0	13	86
WRITE TEST QUESTIONS	3	6	3	6	74

TABLE 23

TYPES OF RADAR EQUIPMENT MAINTAINED BY 303X2 MAJCOM GROUPS
(PERCENT MEMBERS RESPONDING)

<u>RADAR EQUIPMENT*</u>	<u>TAC</u> (N=401)	<u>USAF</u> (N=161)	<u>PACAF</u> (N=34)	<u>AFCC</u> (N=161)	<u>ATC</u> (N=42)
RADAR TRAINERS:					
GPS-T2 (TT)	12	16	9	3	0
GPS-T4 (TT)	12	18	9	10	2
TM-1 (SS)	13	45	9	6	2
RADAR SYSTEMS:					
FPS-6A (TT)	5	2	3	11	0
FPS-20A (TT)	3	1	6	17	0
FPS-90 (TT)	1	0	6	10	0
FPS-91 (TT)	13	0	3	4	0
FPS-116 (TT)	13	0	0	9	0
MPS-11 (SS)	10	1	21	5	0
TPS-43E (SS)	31	70	29	11	0
CODER-DECODER SYSTEMS:					
GPA-122 (SS)	17	2	35	17	0
GPA-125 (SS)	4	0	9	17	0
UPA-59 (SS)	14	31	9	2	0
UPA-59A (SS)	17	51	21	12	0
INTERROGATOR/RESPONDER SETS:					
UPX-6 (TT)	6	0	27	4	0
UPX-14 (TT)	26	2	15	16	0
UPX-23 (SS)	31	73	29	14	0

TABLE 23 (CONTINUED)

TYPES OF RADAR EQUIPMENT MAINTAINED BY 303X2 MAJCOM GROUPS
(PERCENT MEMBERS RESPONDING)

RADAR EQUIPMENT*	TAC (N=401)	USAF (N=161)	PACAF (N=34)	AFCC (N=161)	ATC (N=42)
ANCILLARY EQUIPMENT:					
AM-1796 Delay Line Sets (TT)	14	0	0	7	0
GPA-30 Video Mappers (TT)	3	0	(29)	4	0
GPA-127 Radar Indicators (TT)	25	0	21	8	0
GPS-13A Defruiters (SS)	23	(63)	18	5	0
OA-929 Radar Indicators (TT)	13	0	9	(16)	0
SN-463T Electrical Synchronizers (SS)	9	11	0	2	0
TSQ-61 Operations Central (SS)	13	(42)	24	0	0
UPA-35 Radar Indicators (TT)	1	0	6	11	2
UPA-62C Radar Indicators (SS)	(39)	(71)	(59)	19	0

* SS = Solid-state equipment
TT = Tube-type equipment

TABLE 24

BACKGROUND INFORMATION FOR 303X2 MAJOR COMMAND GROUPS

	TAC (N=401)	USAF (N=161)	PACAF (N=34)	AFCC (N=161)	ATC (N=42)
PERCENT OF TOTAL SAMPLE:	52%	14%	4%	21%	5%
AVERAGE NUMBER OF TASKS PERFORMED:	130	(173)	160	(80)	41
JOB DIFFICULTY INDEX:	13.1	14.9	14.8	11.6	11.3
PERCENT IN CONUS:	90%	-	-	78%	100%
AVERAGE PAYGRADE:	E-4	E-4, E-5	E-4	E-4	E-5
DAFSC:					
30332	28%	9%	29%	13%	-
30352	49%	56%	44%	61%	57%
30372	23%	35%	27%	26%	43%
AVERAGE MONTHS TICP:	69	100	114	73	89
AVERAGE MONTHS TAFMS:	79	112	122	89	93
PERCENT IN FIRST ENLISTMENT:	59%	40%	50%	52%	17%
FIND JOB INTERESTING:	73%	72%	82%	55%	93%
FEEL JOB UTILIZES TALENTS AT LEAST FAIRLY WELL:	84%	76%	94%	74%	93%
FEEL JOB UTILIZES TRAINING AT LEAST FAIRLY WELL:	81%	75%	81%	62%	91%
PLAN TO REENLIST:	54%	62%	59%	47%	64%

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

A comparison was made between the tasks performed and the background data for the DAFSC 30352 personnel assigned within the CONUS versus those assigned to overseas locations. Overall, the jobs performed by the two groups are very similar with respect to tasks performed and the time spent on those tasks. The job of the overseas respondents, however, seems to involve more of a mobile mission, primarily because most of the AC&W radars at overseas locations are of a mobile type.

Table 25 provides various background data for both groups. Five-skill level personnel sampled in CONUS numbered 284, while those overseas totaled 115. The average number of tasks performed by these group members was 113 for CONUS personnel and 163 for the overseas incumbents. As expected, time in service is higher for the overseas group and, correspondingly, the percentage of first-enlistment personnel is lower in the overseas group (56 percent overseas versus 62 percent for CONUS). The two groups are very similar in all job satisfaction indicators--reenlistment plans reflect the only variance, with overseas personnel expressing more favorable intentions (60 percent versus 54 percent for CONUS). Although many pieces of equipment are maintained by both groups (see Table 25 for examples), some significant differences between the groups are attributable to the nature of the equipment, fixed or mobile, or the mission, air defense of the North American Continent or mobile tactical air control and warning.

A number of task differences and similarities were noted between CONUS and overseas incumbents. There were only three tasks identified where percent members performing was greater for CONUS personnel (see Table 26). Two of those tasks are unique to training jobs found primarily in the CONUS. Several tasks, such as conducting OJT, adjusting modulators, removing or replacing power supply components, and performing general soldering, are performed by roughly equal percentages of CONUS and overseas respondents. Finally, Table 26 reveals mobile radar type tasks, such as operating 407L loading kits, erecting tents, constructing field fortifications, and erecting mobile antennas, are performed by substantially higher percentages of overseas personnel.

TABLE 25

BACKGROUND AND JOB SATISFACTION INFORMATION FOR DAFSC 30352
CONUS AND OVERSEAS PERSONNEL

	CONUS PERSONNEL (N=284)	OVERSEAS PERSONNEL (N=115)
AVERAGE NUMBER OF TASKS PERFORMED:	113	163
JOB DIFFICULTY INDEX:	12.8	15.0
PERCENT SUPERVISING:	31%	37%
AVERAGE MONTHS TAFMS:	57	71
PERCENT IN FIRST ENLISTMENT:	62%	56%
FIND JOB INTERESTING:	67%	70%
FEEL JOB UTILIZES TALENTS AT LEAST FAIRLY WELL:	79%	83%
FEEL JOB UTILIZES TRAINING AT LEAST FAIRLY WELL:	78%	77%
PLAN TO REENLIST:	54%	60%
EQUIPMENT MAINTAINED (OVER 10 PERCENT RESPONDING):		
RADAR TRAINERS		
GPS-T2 (TT)	8%	20%
GPS-T4 (TT)	11%	24%
TM-1 (SS)	13%	29%
RADAR SYSTEMS		
FPS-6A (TT)	6%	10%
FPS-91 (TT)	11%	-
FPS-93A (TT)	-	10%
PPS-116 (TT)	11%	-
TPS-43E (SS)	25%	51%

TABLE 25 (CONTINUED)

BACKGROUND AND JOB SATISFACTION INFORMATION FOR DAFSC 30352
CONUS AND OVERSEAS PERSONNEL

	CONUS PERSONNEL (N=284)	OVERSEAS PERSONNEL (N=115)
<u>CODER-DECODER SYSTEMS</u>		
GPA-122 (SS)	15%	18%
GPA-125 (SS)	3%	18%
UPA-59 (SS)	8%	24%
UPA-59A (SS)	17%	37%
<u>INTERROGATOR-RESPONDER SETS</u>		
UPX-14 (TT)	24%	13%
UPX-23 (SS)	26%	51%
<u>ANCILLARY EQUIPMENT</u>		
AM-1796 DELAY LINE SETS (TT)	14%	-
GPA-127 RADAR INDICATORS (TT)	22%	11%
OA-15 CAMERAS (TT)	1%	10%
OA-929 RADAR INDICATORS (TT)	11%	11%
TSQ-61 OPERATIONS CENTRAL (SS)	10%	27%
UPA-62C RADAR INDICATORS (SS)	31%	65%

SS - Solid-state equipment

TT - Vacuum tube-type equipment

TABLE 26

TASKS WHICH BEST DIFFERENTIATE DAFSC 30352
CONUS AND OVERSEAS PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING			DIFFERENCE
	CONUS (N=284)	OVERSEAS (N=115)		
PREPARE LESSON PLANS	17	3		+14
ADMINISTER OR SCORE TESTS	11	0		+11
PERFORM FACILITY ROUTINES WITH THE AN/FYQ-47 COMMON DIGITIZERS	13	2		+11
-----	-----	-----	-----	-----
REMOVE OR REPLACE IF PREAMPLIFIER COMPONENTS	30	27		+ 3
ADJUST ANTENNA CONTROL SYSTEMS	33	31		+ 2
CONDUCT OJT	22	22		0
REMOVE OR REPLACE TRANSMIT-RECEIVE (TR) TUBES	31	31		0
ISOLATE ANALOGY MTI RECEIVER MALFUNCTIONS	23	24		- 1
ADJUST MODULATORS	37	40		- 3
ADJUST ANGLE MARK CIRCUITS	40	52		-12
REMOVE OR REPLACE POWER SUPPLY COMPONENTS	40	52		-12
PERFORM GENERAL SOLDERING	65	78		-13
-----	-----	-----	-----	-----
OPERATE 407L LOADING KITS	8	32		-24
RIG VEHICLES FOR DEPLOYMENTS OR REDEPLOYMENTS	16	41		-25
ADJUST DEFRUITERS	17	42		-25
ERECT TENTS	17	43		-26
CONSTRUCT FIELD FORTIFICATIONS	9	35		-26
LOAD CODES IN KIR-1A COMPUTERS	17	43		-26
ERECT CAMOUFLAGE NETTINGS	18	44		-26
PACK RADAR EQUIPMENT FOR DEPLOYMENT	19	46		-27
REMOVE OR REPLACE SOLID-STATE SIF DECODER COMPONENTS	16	44		-28
ERECT MOBILE ANTENNAS	16	44		-28
TEAR DOWN, INSPECT, CLEAN, AND REASSEMBLE M-16 RIFLES	19	51		-32

COMPARISON TO PREVIOUS SURVEY

The results of this 303X2 survey were compared to those of the previous Occupational Survey Report, AFPT 90-303-400, Volume III, dated May 1981. This analysis can help to identify changes in the career ladder due to new missions, changing management policies, new operational equipment, etc. Generally, the two surveys reported consistent findings, with differences appearing in the following areas:

A review of the 303X2 career ladder structure reveals that no substantial job changes have occurred in the last 4 years. Table 27 lists the major job groups identified in the 1980 survey and the equivalent major job groups identified in the current study. The biggest difference seems to be that in the 1984 survey the journeyman radar job is identified by two distinct groups, the Fixed and the Tactical Radar Maintenance Personnel clusters, whereas in 1980 the fixed and tactical radar maintenance jobs were accounted for as jobs within the AC&W Radar Maintenance Personnel cluster. Another difference is that the engineering installation and radar evaluations jobs (representing less than 5 percent of the current survey) were not identifiable in the previous survey. These differences are minor, and the overall structure is relatively stable.

Table 28 lists the percentages of 1980 and 1984 first-enlistment personnel maintaining various types of radar equipment. The overall trend appears to be that career field equipment is being replaced or modified and a greater percentage of first-enlistment personnel are maintaining solid-state equipment than in 1980.

Job satisfaction data were reviewed for both 1980 and 1984, first, second, and career enlistment groups (see Table 25). Personnel across all 1984 enlistment groups expressed higher job satisfaction than the 1980 respondents, with the greatest increase expressed by the first-enlistment group. For example, 83 percent of the 1984 first-enlistment personnel felt their talents were at least fairly well utilized, compared to 61 percent in 1980.

TABLE 27

A COMPARISON OF MAJOR JOB GROUPS IDENTIFIED
IN THE 1981 AND 1985 OSR

1981 CLUSTERS AND INDEPENDENT JOB TYPES	1985 CLUSTERS AND INDEPENDENT JOB TYPES
RADAR MAINTENANCE SUPERVISORS (C) NCOICs, PLANS AND SCHEDULING (IJT) TACTICAL RADAR MAINTENANCE NCOICs (IJT)	RADAR MAINTENANCE SUPERVISORS (C) PROGRAM MANAGERS (IJT)
QUALITY CONTROL PERSONNEL (C)	QUALITY CONTROL INSPECTORS (IJT)
JUNIOR AC&W RADAR MAINTENANCE PERSONNEL (C) ANCILLARY MAINTENANCE PERSONNEL (IJT)	JUNIOR AC&W RADAR PERSONNEL (C)
AC&W RADAR MAINTENANCE PERSONNEL (C)	FIXED RADAR MAINTENANCE PERSONNEL (C) TACTICAL RADAR MAINTENANCE PERSONNEL (C)
TACTICAL RADAR CREW MEMBERS (IJT)	TACTICAL RADAR CREW MEMBERS (IJT)
NI*	ENGINEERING INSTALLATION TEAM MEMBERS (IJT)
NI*	RADAR EVALUATION PERSONNEL (C)
JOB CONTROL PERSONNEL (C)	JOB CONTROLLERS (IJT)
RESIDENT COURSE INSTRUCTORS (IJT)	INSTRUCTOR PERSONNEL (C)

* Not identifiable

C = Cluster

IJT = Independent Job Type

TABLE 28

A COMPARISON BETWEEN CERTAIN EQUIPMENT
MAINTAINED BY 1980 AND 1984 SURVEY FIRST-ENLISTMENT PERSONNEL

EQUIPMENT OR SYSTEM	PERCENT MEMBERS MAINTAINING	
	1980	1984
FPS-90		
RADAR SET (TT)		2
FPS-107	29	3
RADAR SET (TT)	21	(36)
TPS-43E	24	
RADAR SET (SS)		21
GPA-127	41	3
RADAR INDICATOR (TT)		(44)
UPA-35	13	
RADAR INDICATOR (TT)		0
UPA-62	23	0
RADAR INDICATOR (SS)		15
GPX-7A	8	(23)
IFF SYSTEM (TT)		
GPX-188	8	
IFF SYSTEM (TT)		
UPA-59	20	
DECODER (SS)		
UPA-59A	12	
DECODER (SS)		
UPX-14	34	24
INTERROGATOR (TT)		(37)
UPX-23	24	
INTERROGATOR (SS)		

TT = Vacuum Tube type Equipment

SS = Solid-State Type Equipment

TABLE 29

COMPARISON OF JOB SATISFACTION DATA FOR VARIOUS
303X2 ENLISTMENT GROUPS IN THE 1980 AND 1984 SURVEYS
(PERCENT MEMBERS RESPONDING)

	FIRST ENLISTMENT		SECOND ENLISTMENT		CAREER	
	1980	1984	1980	1984	1980	1984
FIND JOB INTERESTING	53	73	51	67	68	69
TALENTS USED AT LEAST FAIRLY WELL	61	83	61	82	75	79
TRAINING USED AT LEAST FAIRLY WELL	68	78	68	81	73	73
PLAN TO REENLIST	27	55	42	67	57	67

ANALYSIS OF WRITE-IN COMMENTS

Respondents are invited to write in any comments relative to their job in back of their inventory booklet. In this survey, a fairly small amount of write-in comments addressed career ladder irritants--overall, the number of write-in comments was relatively low (roughly 1 percent). Generally, they involve perceptions of training or personnel misutilization, such as:

"Engineering and installation is totally different from O&M outfits and should be recognized as such. I do not maintain radar equipment, only install or remove it. I do not feel that I should be tested under WAPS on equipment I don't maintain."

"I only remove and install fixed radar equipment. I feel E&I should be a shred of AC&W radar because most of what I was taught in tech school I will never use in this job."

"I am assigned to an E&I team...I personally do not feel the full potential of my training is being used by the Air Force."

"I was trained to be a maintenance man, I'm now a supervisor. That's 16 years of experience stuck behind a desk."

"I am an instructor, I teach and do not maintain the equipment. This is a waste of the knowledge I have gained on the 407L radar systems."

The three comments, above, pertaining to Engineering Installation personnel are somewhat supported by job satisfaction data presented in the SPECIALTY JOBS section for the Engineering Installation Team members.

TABLE A12

GROUP ID NUMBER AND TITLE: GRP228 - ANCILLARY WORKCENTER REPAIRMEN
 NUMBER IN GROUP: 9 PERCENT OF CLUSTER: 13%
 MAJCOM DISTRIBUTION: AFCC (89%), TAC (11%)
 LOCATION: CONUS (89%), OVERSEAS (11%)
 DAFSC DISTRIBUTION: 30352 (100%)
 AVERAGE GRADE: E-3 AVERAGE MONTHS IN SERVICE: 24
 AVERAGE MONTHS IN CAREER FIELD: 19

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	100
L561 ADJUST VIDEO AMPLIFIER CIRCUITS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
L568 ISOLATE RANGE MARK CIRCUIT MALFUNCTIONS	100
L559 ADJUST SWEEP GENERATING CIRCUITS	100
L572 ISOLATE VIDEO AMPLIFIER CIRCUIT MALFUNCTIONS	100
L587 REMOVE OR REPLACE SWEEP GENERATING CIRCUITS COMPONENTS	100
L589 REMOVE OR REPLACE VIDEO AMPLIFIER CIRCUIT COMPONENT	100
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	100
L560 ADJUST TIME-SHARING CIRCUITS	100
G359 PERFORM CORROSION CONTROL	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
G349 FABRICATE COAXIAL CABLES	100
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	88
L552 ADJUST CURSOR CIRCUITS	88
L558 ADJUST RANGE STROBE CIRCUITS	88
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	88
L557 ADJUST RANGE MARK CIRCUITS	88
L569 ISOLATE RANGE STROBE CIRCUIT MALFUNCTIONS	88
L566 ISOLATE CURSOR CIRCUIT MALFUNCTIONS	88
L550 ADJUST CATHODE RAY (CRT) DEFLECTION CIRCUITS	88
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	88
L570 ISOLATE SWEEP GENERATING CIRCUIT MALFUNCTIONS	88
L564 ISOLATE CRT DEFLECTION CIRCUIT MALFUNCTIONS	88
L582 REMOVE OR REPLACE CURSOR CIRCUIT COMPONENTS	88
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	88
G375 REMOVE OR REPLACE ELECTRONIC CHASSIS	88
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	77

TABLE A11

GROUP ID NUMBER AND TITLE: GRP270 - WEAPONS RANGE RADAR REPAIRMEN
 NUMBER IN GROUP: 11 PERCENT OF CLUSTER: 16%
 MAJCOM DISTRIBUTION: TAC (73%), PACAF (27%)
 LOCATION: CONUS (64%), OVERSEAS (36%)
 DAFSC DISTRIBUTION: 30332 (64%), 30352 (36%)
 AVERAGE GRADE: E-3 AVERAGE MONTHS IN SERVICE: 35
 AVERAGE MONTHS IN CAREER FIELD: 31

<u>GROUP DIFFERENTIATING TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
G372 REMOVE OR REPLACE CABLES	100
L558 ADJUST RANGE STROBE CIRCUITS	100
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	100
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	90
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	90
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	90
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	90
L552 ADJUST CURSOR CIRCUITS	90
L559 ADJUST SWEEP GENERATING CIRCUITS	90
G359 PERFORM CORROSION CONTROL	90
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	90
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	90
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	90
L551 ADJUST CRT PROTECTION CIRCUITS	81
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	81
L557 ADJUST RANGE MARK CIRCUITS	81
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	81
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	81
H385 ADJUST MODULATORS	81
G370 PERFORM SYSTEM GROUNDING CHECKS	81
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	81
L579 REMOVE OR REPLACE CRT	81
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	72
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	72
G375 REMOVE OR REPLACE ELECTRONIC CHASSIS	72
G367 PERFORM POWER DISTRIBUTION SYSTEM OPERATIONAL CHECKS	72

TABLE A10

GROUP ID NUMBER AND TITLE: GRP237 - ELECTRIC COMBAT RANGE RADAR REPAIRMEN

NUMBER IN GROUP: 9

PERCENT OF CLUSTER: 13%

MAJCOM DISTRIBUTION: TAC (67%), PACAF (22%), AFCC (11%)

LOCATION: CONUS (78%), OVERSEAS (22%)

DAFSC DISTRIBUTION: 30332 (78%), 30352 (22%)

AVERAGE GRADE: E-3

AVERAGE MONTHS IN SERVICE: 32

AVERAGE MONTHS IN CAREER FIELD: 29

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
L551 ADJUST CRT PROTECTION CIRCUITS	100
G359 PERFORM CORROSION CONTROL	100
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	88
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	88
L557 ADJUST RANGE MARK CIRCUITS	88
L558 ADJUST RANGE STROBE CIRCUITS	88
G372 REMOVE OR REPLACE CABLES	88
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	88
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	88
C125 PERFORM CORROSION CONTROL INSPECTIONS	88
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	77
C127 PERFORM EQUIPMENT INSPECTIONS	77
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	77
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	77
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	77
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	77
G349 FABRICATE COAXIAL CABLES	77
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	77
L552 ADJUST CURSOR CIRCUITS	66
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	66
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	66
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	66
L559 ADJUST SWEEP GENERATING CIRCUITS	66
G344 ADJUST SOLID-STATE POWER SUPPLIES	66
G367 PERFORM POWER DISTRIBUTION SYSTEM OPERATIONAL CHECKS	55
K529 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING CONVENTIONAL TEST EQUIPMENT	55
N636 PERFORM SIF SYSTEM OPERATIONAL CHECKS	55
G342 ADJUST INTERLOCK PROTECTIVE CIRCUITS	55

TABLE A9

GROUP ID NUMBER AND TITLE: GRP083 - JUNIOR AC&W RADAR MAINTENANCE PERSONNEL
 NUMBER IN GROUP: 67 PERCENT OF SAMPLE: 9%
 MAJCOM DISTRIBUTION: TAC (66%), AFCC (27%), PACAF (7%)
 LOCATION: CONUS (87%), OVERSEAS (13%)
 DAFSC DISTRIBUTION: 30332 (48%) 30352 (52%)
 AVERAGE GRADE: E-3 AVERAGE MONTHS IN SERVICE: 28
 AVERAGE MONTHS IN CAREER FIELD: 25

<u>GROUP DIFFERENTIATING TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
G359 PERFORM CORROSION CONTROL	95
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	91
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	89
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	88
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	86
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	83
G372 REMOVE OR REPLACE CABLES	83
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	83
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	77
G349 FABRICATE COAXIAL CABLES	77
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	74
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	73
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	71
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	67
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	61
L557 ADJUST RANGE MARK CIRCUITS	61
L552 ADJUST CURSOR CIRCUITS	55
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	53
L558 ADJUST RANGE STROBE CIRCUITS	53
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	52
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	52
L559 ADJUST SWEEP GENERATING CIRCUITS	50
G370 PERFORM SYSTEM GROUNDING CHECKS	50
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	49
L551 ADJUST CRT PROTECTION CIRCUITS	49
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	49
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	47
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	47
G379 TERMINATE CABLES	44
H393 ADJUST TRANSMITTER POWER SUPPLIES	43

TABLE A8

GROUP ID NUMBER AND TITLE: GRP161 - AC&W PROGRAM MANAGERS
 NUMBER IN GROUP: 5 PERCENT OF SAMPLE: 12
 MAJCOM DISTRIBUTION: TAC (40%), USAF (40%), AFCC (20%)
 LOCATION: CONUS: (40%), OVERSEAS (60%)
 DAFSC DISTRIBUTION: 30372 (100%)
 AVERAGE GRADE: E-7 AVERAGE MONTHS IN SERVICE: 216
 AVERAGE MONTHS IN CAREER FIELD: 175

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B84 WRITE CORRESPONDENCE OR MESSAGES	100
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
B50 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	100
E267 REVIEW CORRESPONDENCE	100
C103 EVALUATE MATERIEL DEFICIENCY REPORTS (MDR)	100
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	100
C112 EVALUATE TECHNICAL ORDER IMPROVEMENT REPORTS	100
C106 EVALUATE QUALITY CONTROL PROCEDURES	80
C143 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, OTHER THAN TRAINING REPORTS	80
C88 CONDUCT STAFF ASSISTANCE VISITS	80
C99 EVALUATE INSPECTION OR MAINTENANCE REPORTS	80
C102 EVALUATE MAINTENANCE PRODUCTION REPORTS	80
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	80
C85 ANALYZE TRENDS IN SYSTEM MALFUNCTIONS	80
C111 EVALUATE TECHNICAL LITERATURE DEFICIENCY REPORTS	80
C93 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	80
B78 PREPARE MODIFICATION PROPOSALS	80
E273 REVIEW TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	80
E271 REVIEW MAINTENANCE OR INSPECTION REPORTS	60
A23 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	60
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	60
A35 PREPARE BRIEFINGS	60
C96 EVALUATE DATA ON DEVELOPMENT OR MODIFICATION OF EQUIPMENT	60
C124 PERFORM ACTIVITY INSPECTIONS	60
B51 CONDUCT BRIEFINGS	60
E270 REVIEW MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEMS (MMICS) OUTPUT DATA	60
C87 CONDUCT MAINTENANCE INSPECTIONS	60
C110 EVALUATE SUGGESTIONS	60
E232 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	60
C100 EVALUATE MAINTENANCE DATA COLLECTION (MDC) REPORTS	60

TABLE A7

GROUP ID NUMBER AND TITLE: GRP275 - QUALITY CONTROL INSPECTORS
 NUMBER IN GROUP: 33 PERCENT OF SAMPLE: 4%
 MAJCOM DISTRIBUTION: TAC (64%), USAFE (24%), PACAF (9%), OTHER (3%)
 LOCATION: CONUS (58%), OVERSEAS (42%)
 DAFSC DISTRIBUTION: 30352 (12%), 30372 (88%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 202
 AVERAGE MONTHS IN CAREER FIELD: 185

<u>GROUP DIFFERENTIATING TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
E251 PREPARE INSPECTION REPORTS	100
C127 PERFORM EQUIPMENT INSPECTIONS	96
E225 MAKE ENTRIES ON AF FORMS 2419 (ROUTING AND REVIEW OF QUALITY CONTROL REPORTS)	96
E226 MAKE ENTRIES ON AF FORMS 2420 (QUALITY CONTROL INSPECTION SUMMARY)	96
C112 EVALUATE TECHNICAL ORDER IMPROVEMENT REPORTS	96
C87 CONDUCT MAINTENANCE INSPECTIONS	93
C113 EVALUATE TECHNICAL PERFORMANCE OF PERSONNEL	93
C132 PERFORM PERSONNEL PROFICIENCY EVALUATIONS	90
B67 IMPLEMENT QUALITY CONTROL PROGRAMS	90
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	90
B84 WRITE CORRESPONDENCE OR MESSAGES	90
A41 SCHEDULE INSPECTIONS	90
C93 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	87
C133 PERFORM QUALITY ASSURANCE CHECKS	87
E229 MAKE ENTRIES ON AFTO FORMS 110 AND 110A (TECHNICAL ORDER DISTRIBUTION RECORD)	87
E230 MAKE ENTRIES ON AFTO FORMS 131 (TECHNICAL ORDER INDEX ROUTINE AND ANNUAL CHECK)	87
C99 EVALUATE INSPECTION OR MAINTENANCE REPORTS	87
C134 PERFORM SELF-INSPECTIONS	87
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	87
E272 REVIEW TECHNICAL ORDERS (TO)	84
C125 PERFORM CORROSION CONTROL INSPECTIONS	84
C95 EVALUATE CORROSION CONTROL PROGRAMS	84
E273 REVIEW TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	84
E185 COMPLETE MATERIEL DEFICIENCY REPORTS (MDR)	84
E258 PREPARE QUALITY CONTROL DISCREPANCY REPORTS	81
E271 REVIEW MAINTENANCE OR INSPECTIONS REPORTS	81
C106 EVALUATE QUALITY CONTROL PROCEDURES	81
E224 MAKE ENTRIES ON AF FORMS 2415 (QUALITY CONTROL CHECKSHEET)	81
C103 EVALUATE MATERIEL DEFICIENCY REPORTS (MDR)	81
C126 PERFORM DEFICIENCY INSPECTIONS	81

TABLE A6

GROUP ID NUMBER AND TITLE: GRP231 - INSTRUCTOR SUPERVISORS
 NUMBER IN GROUP: 5 PERCENT OF CLUSTER: 5%
 MAJCOM DISTRIBUTION: ATC (100%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30352 (20%), 30372 (80%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 202
 AVERAGE MONTHS IN CAREER FIELD: 197

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
D158 DEVELOP FORMAL COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	100
D152 CONDUCT TECHNICAL SCHOOL CLASSROOM TRAINING	100
D169 EVALUATE PROGRESS OF TECHNICAL SCHOOL STUDENTS	100
D144 ADMINISTER OR SCORE TESTS	100
D170 EVALUATE TRAINING METHODS OR TECHNIQUES	100
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
D177 PREPARE LESSON PLANS	100
D181 WRITE TEST QUESTIONS	100
C134 PERFORM SELF-INSPECTIONS	100
C140 WRITE APR	100
C142 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	100
D174 PREPARE CHANGES TO COURSE SUMMARY DOCUMENTS AND COURSE OBJECTIVE DOCUMENTS	100
D175 PREPARE COURSE CONTROL DOCUMENTS	100
D178 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	100
A43 SCHEDULE PERSONNEL FOR SCHOOLS, TEMPORARY DUTY (TDY) ASSIGNMENTS, OR NONTECHNICAL TRAINING	100
B77 ORIENT NEWLY ASSIGNED PERSONNEL	100
D146 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	100
A42 SCHEDULE LEAVES OR PASSES	100
B51 CONDUCT BRIEFINGS	100
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	100
B80 SUPERVISE AC&W RADAR SPECIALISTS (AFSC 30352)	80
B79 SUPERVISE AIRCRAFT CONTROL AND WARNING (AC&W) RADAR TECHNICIANS (AFSC 30372)	80
B84 WRITE CORRESPONDENCE OR MESSAGES	80
D161 DEVELOP PERFORMANCE TESTS	80
D147 ASSIGN TECHNICAL SCHOOL INSTRUCTORS	80
E272 REVIEW TECHNICAL ORDERS (TO)	80
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	80
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	80
D148 BRIEF PERSONNEL ON TRAINING METHODS OR PROCEDURES	80
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	80

TABLE A5

GROUP ID NUMBER AND TITLE: GRP229 - NCOICs, JOB CONTROL
 NUMBER IN GROUP: 7 PERCENT OF CLUSTER: 7%
 MAJCOM DISTRIBUTION: TAC (71%), AFCC (29%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30372 (100%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 175
 AVERAGE MONTHS IN CAREER FIELD: 172

<u>GROUP DIFFERENTIATING TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
B83 SUPERVISE MILITARY PERSONNEL IN CAREER FIELDS OTHER THAN AFS 303X2	100
E215 MAINTAIN STATUS BOARDS OR JOB CONTROL BOARDS	100
B61 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	100
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	100
B84 WRITE CORRESPONDENCE OR MESSAGES	100
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	100
B75 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
A15 DEVELOP WORK METHODS OR PROCEDURES	100
E267 REVIEW CORRESPONDENCE	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
A26 ESTABLISH WORK SCHEDULES	100
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	100
C140 WRITE APR	100
A42 SCHEDULE LEAVES OR PASSES	100
B77 ORIENT NEWLY ASSIGNED PERSONNEL	100
A23 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	85
A8 DETERMINE WORK PRIORITIES	85
B45 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	85
B51 CONDUCT BRIEFINGS	85
B80 SUPERVISE AC&W RADAR SPECIALISTS (AFSC 30352)	85
C118 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	85
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	85
D149 CONDUCT OJT	85
E189 DOCUMENT CANNIBALIZATION	85
C98 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	85
E227 MAKE ENTRIES ON AF FORMS 2446 (SCHEDULE OF TECHNICIAN AVAILABILITY)	

TABLE A4

GROUP ID NUMBER AND TITLE: GRP201 - NCOICs, ANCILLARY MAINTENANCE
 NUMBER IN GROUP: 6 PERCENT OF CLUSTER: 6%
 MAJCOM DISTRIBUTION: TAC (67%), AFCC (33%)
 LOCATION: CONUS (17%), OVERSEAS (83%)
 DAFSC DISTRIBUTION: 30352 (83%), 30372 (17%)
 AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 87
 AVERAGE MONTHS IN CAREER FIELD: 82

<u>GROUP DIFFERENTIATING TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F333 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	100
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	100
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	100
F334 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	100
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	100
F291 ESTIMATE OR VALIDATE BENCH STOCK REQUIREMENTS	100
E207 MAINTAIN HISTORICAL RECORDS	100
G349 FABRICATE COAXIAL CABLES	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	100
G372 REMOVE OR REPLACE CABLES	100
F281 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	100
E268 REVIEW DUE IN FROM MAINTENANCE (DIFM) RUNS	100
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	100
F300 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	100
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	100
F299 INVENTORY BENCH STOCK ITEMS	100
L589 REMOVE OR REPLACE VIDEO AMPLIFIER CIRCUIT COMPONENTS	100
D149 CONDUCT OJT	83
B56 COORDINATE MAINTENANCE SCHEDULES WITH JOB CONTROL	83
C127 PERFORM EQUIPMENT INSPECTIONS	83
E219 MAINTAIN TECHNICAL ORDER FILES	83
C125 PERFORM CORROSION CONTROL INSPECTIONS	83
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	83
L559 ADJUST SWEEP GENERATING CIRCUITS	83
G359 PERFORM CORROSION CONTROL	83

TABLE A3

GROUP ID NUMBER AND TITLE: GRP218 - NCOICs, TACTICAL RADAR MAINTENANCE
 NUMBER IN GROUP: 18 PERCENT OF CLUSTER: 19%
 MAJCOM DISTRIBUTION: TAC (44%), USAFE (39%), PACAF (11%), OTHER (6%)
 LOCATION: CONUS (50%), OVERSEAS (50%)
 DAFSC DISTRIBUTION: 30352 (28%), 30372 (72%)
 AVERAGE GRADE: E-5, E-6 AVERAGE MONTHS IN SERVICE: 175
 AVERAGE MONTHS IN CAREER FIELD: 161

<u>GROUP DIFFERENTIATING TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
C138 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
F333 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	100
C140 WRITE APR	100
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	100
B75 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	94
F334 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	94
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	94
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	94
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	94
A8 DETERMINE WORK PRIORITIES	94
B56 COORDINATE MAINTENANCE SCHEDULES WITH JOB CONTROL	94
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	94
C139 REVIEW SUPPLY OR EQUIPMENT INVENTORIES	94
F282 CERTIFY STATUS OR REPARABLE, SERVICEABLE, OR CONDEMNED PARTS	94
C136 PERFORM VEHICLE INSPECTIONS	94
C134 PERFORM SELF-INSPECTIONS	94
A26 ESTABLISH WORK SCHEDULES	94
C142 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	94
E239 MAKE ENTRIES ON AFTO FORMS 95 (SIGNIFICANT HISTORICAL DATA)	94
E191 EDIT AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	88
C127 PERFORM EQUIPMENT INSPECTIONS	88
C93 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	88
B45 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	88
F335 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	88
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	88
F332 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	88
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	88

TABLE A2

GROUP ID NUMBER AND TITLE: GRP190 - NCOICs, FIXED RADAR MAINTENANCE
 NUMBER IN GROUP: 28 PERCENT OF CLUSTER: 29%
 MAJCOM DISTRIBUTION: TAC (79%), AFCC (18%), OTHER (3%)
 LOCATION: CONUS (75%), OVERSEAS (25%)
 DAFSC DISTRIBUTION: 30352 (4%), 30372 (96%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 209
 AVERAGE MONTHS IN CAREER FIELD: 197

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B80 SUPERVISE AC&W RADAR SPECIALISTS (AFSC 30352)	100
C140 WRITE APR	100
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	100
C134 PERFORM SELF-INSPECTIONS	100
C142 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	100
A8 DETERMINE WORK PRIORITIES	96
C138 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	96
A26 ESTABLISH WORK SCHEDULES	92
D146 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	92
F335 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	92
B77 ORIENT NEWLY ASSIGNED PERSONNEL	92
E207 MAINTAIN HISTORICAL RECORDS	92
B84 WRITE CORRESPONDENCE OR MESSAGES	89
A42 SCHEDULE LEAVES OR PASSES	89
E227 MAKE ENTRIES ON AF FORMS 2446 (SCHEDULE OF TECHNICIAN AVAILABILITY)	89
F333 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	89
B81 SUPERVISE APPRENTICE AC&W RADAR SPECIALISTS (30332)	85
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	85
A44 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	85
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	85
F332 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	85
E225 MAKE ENTRIES ON AF FORMS 2419 (ROUTING AND REVIEW OF QUALITY CONTROL REPORTS)	85
E239 MAKE ENTRIES ON AFTO FORMS 95 (SIGNIFICANT HISTORICAL DATA)	85
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	85
F312 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	85
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	82
D156 DETERMINE OJT TRAINING REQUIREMENTS	82
E191 EDIT AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	82
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	82
F281 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	82

TABLE A1

GROUP ID NUMBER AND TITLE: GRP071 - RADAR MAINTENANCE SUPERVISORS
 NUMBER IN GROUP: 96 PERCENT OF SAMPLE: 13%
 MAJCOM DISTRIBUTION: TAC (52%), AFCC (17%), USAFE (15%), PACAF (7%),
 OTHER (9%)
 CONUS LOCATION: CONUS (67%), OVERSEAS (33%)
 DAFSC DISTRIBUTION: 30332 (2%), 30352 (27%), 30372 (71%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 170
 AVERAGE MONTHS IN CAREER FIELD: 157

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
A8 DETERMINE WORK PRIORITIES	89
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	88
C140 WRITE APR	86
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	86
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	79
B77 ORIENT NEWLY ASSIGNED PERSONNEL	79
C134 PERFORM SELF-INSPECTIONS	78
B84 WRITE CORRESPONDENCE OR MESSAGES	76
B80 SUPERVISE AC&W RADAR SPECIALISTS (AFSC 30352)	75
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	75
A26 ESTABLISH WORK SCHEDULES	73
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	71
A42 SCHEDULE LEAVES OR PASSES	71
B75 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	70
C138 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	70
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	70
C142 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	70
A24 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	69
E200 LOCATE INFORMATION IN TECHNICAL STANDARD, OR SUPPLY PUBLICATIONS	69
B45 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	67
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	67
F334 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	67
F333 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	67
A44 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	66
F312 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	66
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	64
F335 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	64
E227 MAKE ENTRIES ON AF FORMS 2446 (SCHEDULE OF TECHNICIAN AVAILABILITY)	63
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	63
E191 EDIT AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	62

APPENDIX A

IMPLICATIONS

This survey was conducted primarily to provide technical training personnel with current information on the Aircraft Control and Warning Radar maintenance specialty for use in evaluating the 303X2 STS and entry-level POI. In comparing the current and previous surveys, the most significant change in the 303X2 career ladder is in the structure of the ladder; that is, the specialty jobs identified and the numbers of respondents performing those jobs. In the current survey, two large clusters (of equal size) were identified as journeyman AC&W radar repairmen, one of fixed radar, the other of tactical or mobile radar. In the previous survey, the tactical radar repairmen were a relatively smaller percent of the survey sample (13 percent versus 21 percent in the current study. This shift in career ladder jobs is due to increased employment of the AN/TPS-43E, state-of-the-art, lightweight 3-D surveillance radar.

The current 30332 POI was implemented since the last survey and was developed to support the AN/TPS-43E. The POI was well supported by survey data, although a review of tasks not matched to the POI is required based on percent members performing certain of those tasks. Thirty-six percent of first-enlistment personnel performed maintenance on the TPS-43E, only two other systems were maintained by over 10 percent of the first-enlistment group. Eleven percent responded they maintained either the FPS-91 or FPS-116 fixed radars.

A review of job satisfaction reveals several interesting trends. First, present 303X2 incumbents appear much more satisfied with their jobs than those in the previous survey. Second, perceived utilization of training is very good for fixed and tactical radar maintenance personnel. Finally, job satisfaction varies across the major job groups identified in the career ladder structure, with Job Controllers and Engineering Installation Team Members being very dissatisfied with their jobs. Managers and supervisors need to be aware of these dissatisfying jobs, and try to find ways to improve them.

TABLE A13

GROUP ID NUMBER AND TITLE: GRP314 - SIF REPAIRMEN

NUMBER IN GROUP: 6

PERCENT OF CLUSTER: 9%

MAJCOM DISTRIBUTION: AFCC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30332 (17%), 30352 (83%)

AVERAGE GRADE: E-3, E-4

AVERAGE MONTHS IN SERVICE: 36

AVERAGE MONTHS IN CAREER FIELD: 17

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
N616 ADJUST SOLID-STATE SIF CODERS	100
N617 ADJUST SOLID-STATE SIF DECODERS	100
N631 ISOLATE TUBE-TYPE INTERROGATOR-RESPONDER MALFUNCTIONS	100
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	100
N611 ADJUST GAIN TIME CONSTANT (GTC) CIRCUITS	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	100
G359 PERFORM CORROSION CONTROL	100
H391 ADJUST TRANSMITTER PERFORMANCE MONITOR CIRCUITS	100
K500 ADJUST VIDEO AMPLIFIERS	100
H390 ADJUST TRANSMITTER OUTPUT TUBES	100
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
G349 FABRICATE COAXIAL CABLES	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
N636 PERFORM SIF SYSTEM OPERATIONAL CHECKS	83
N618 ADJUST TUBE-TYPE INTERROGATOR-RESPONDERS	83
N630 ISOLATE SOLID-STATE SIF DECODER MALFUNCTIONS	83
N629 ISOLATE SOLID-STATE SIF CODER MALFUNCTIONS	83
N645 REMOVE OR REPLACE SOLID-STATE SIF CODER COMPONENTS	83
N646 REMOVE OR REPLACE SOLID-STATE SIF DECODER COMPONENTS	83
G344 ADJUST SOLID-STATE POWER SUPPLIES	83
E233 MAKE ENTRIES ON AFTO FORMS 244 AND 245 (SYSTEM/EQUIPMENT STATUS RECORD)	83
K518 ISOLATE IF AMPLIFIER MALFUNCTIONS	83
K495 ADJUST RECEIVER RF AMPLIFIERS	83
H422 REMOVE OR REPLACE TRANSMITTER POWER OUTPUT TUBES	83
G358 ISOLATE SOLID-STATE POWER SUPPLY MALFUNCTIONS	83

TABLE A14

GROUP ID NUMBER AND TITLE: GRP260 - RADAR HEIGHT FINDER OPERATORS
 NUMBER IN GROUP: 7 PERCENT OF CLUSTER: 10%
 MAJCOM DISTRIBUTION: TAC (100%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30332 (71%), 30352 (29%)
 AVERAGE GRADE: E-3 AVERAGE MONTHS IN SERVICE: 18
 AVERAGE MONTHS IN CAREER FIELD: 15

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
L576 PERFORM RHI OPERATIONAL CHECKS	100
G345 CALCULATE REFRACTIVE INDEXES	100
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
G359 PERFORM CORROSION CONTROL	100
F283 COMPLETE AF FORMS 2005 ISSUE/TURN IN REQUEST)	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
K481 ADJUST AUTOMATIC FREQUENCY CONTROL (AFC) CIRCUITS	100
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	100
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	85
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	85
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	85
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	85
J455 ADJUST WAVE-GUIDE PRESSURIZING SYSTEMS	85
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	85
G372 REMOVE OR REPLACE CABLES	85
L573 PERFORM HEIGHT FINDER OPERATOR DUTIES, SUCH AS BISECTING HEIGHT TARGETS ON RHI DISPLAYS	85
G349 FABRICATE COAXIAL CABLES	85
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	71
K483 ADJUST CRYSTAL MIXERS	71
L557 ADJUST RANGE MARK CIRCUITS	71
J471 REMOVE OR REPLACE WAVE-GUIDE PRESSURIZING SYSTEM COMPONENTS	71
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	57
F300 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	57
L549 ADJUST ANGLE MARK CIRCUITS	57
O658 PERFORM OPERATIONAL CHECK OF RADOME HEATING SYSTEMS	57
G365 PERFORM INTERLOCK PROTECTIVE CIRCUIT OPERATIONAL CHECKS	57
O663 REMOVE OR REPLACE RADOME HEATING SYSTEM COMPONENTS	57

TABLE A15

GROUP ID NUMBER AND TITLE: GRP171 - FIXED RADAR MAINTENANCE PERSONNEL
 NUMBER IN GROUP: 159 PERCENT OF SAMPLE: 21%
 MAJCOM DISTRIBUTION: TAC (76%), AFCC (16%), OTHER (8%)
 LOCATION: CONUS (76%), OVERSEAS (24%)
 DAFSC DISTRIBUTION: 30332 (25%), 30352 (66%), 30372 (9%)
 AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 55
 AVERAGE MONTHS IN CAREER FIELD: 46

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	97
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	92
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	95
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	94
G359 PERFORM CORROSION CONTROL	94
G372 REMOVE OR REPLACE CABLES	94
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	94
K483 ADJUST CRYSTAL MIXERS	93
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	92
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	90
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	89
G349 FABRICATE COAXIAL CABLES	88
H398 ISOLATE MODULATOR MALFUNCTIONS	87
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	87
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	86
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	86
L557 ADJUST RANGE MARK CIRCUITS	85
H383 ADJUST MODULATOR CONTROL CIRCUITS	84
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	84
H393 ADJUST TRANSMITTER POWER SUPPLIES	81
K537 REMOVE OR REPLACE CRYSTAL MIXER COMPONENTS	81
G355 ISOLATE INTERLOCK PROTECTIVE CIRCUIT MALFUNCTIONS	81
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	80
H406 ISOLATE TRANSMITTER POWER SUPPLY MALFUNCTIONS	80
G380 TEST INTERLOCK CIRCUITS	80
L549 ADJUST ANGLE MARK CIRCUITS	79
H385 ADJUST MODULATORS	79
G365 PERFORM INTERLOCK PROTECTIVE CIRCUIT OPERATIONAL CHECKS	79
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	79
K511 ISOLATE CRYSTAL MIXER MALFUNCTIONS	79

TABLE A16

GROUP ID NUMBER AND TITLE: GRP316 - FIXED SEARCH RADAR REPAIRMEN
 NUMBER IN GROUP: 62 PERCENT OF CLUSTER: 39%
 MAJCOM DISTRIBUTION: TAC (64%), AFCC (18%), OTHER (5%)
 LOCATION: CONUS (74%), OVERSEAS (26%)
 DAFSC DISTRIBUTION: 30332 (21%), 30352 (73%), 30372 (6%)
 AVERAGE GRADE: E-3, E-4 AVERAGE MONTHS IN SERVICE: 49
 AVERAGE MONTHS IN CAREER FIELD: 42

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	98
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	98
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	98
G372 REMOVE OR REPLACE CABLES	98
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	98
H398 ISOLATE MODULATOR MALFUNCTIONS	98
K483 ADJUST CRYSTAL MIXERS	96
K498 ADJUST STABLE LOCAL OSCILLATORS (STALO)	96
G359 PERFORM CORROSION CONTROL	96
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	95
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	95
K477 ADJUST ANALOG MOVING TARGET INDICATOR (MTI) RECEIVERS	93
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	93
G349 FABRICATE COAXIAL CABLES	93
K547 REMOVE OR REPLACE STALO COMPONENTS	93
G355 ISOLATE INTERLOCK PROTECTIVE CIRCUIT MALFUNCTIONS	93
H390 ADJUST TRANSMITTER OUTPUT TUBES	91
K491 ADJUST INTERMEDIATE FREQUENCY (IF) AMPLIFIERS	91
K492 ADJUST INTERMEDIATE FREQUENCY (IF) PREAMPLIFIERS	91
K537 REMOVE OR REPLACE CRYSTAL MIXER COMPONENTS	91
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	91
K525 ISOLATE STALO MALFUNCTIONS	90
H389 ADJUST TRANSMITTER FREQUENCY GENERATING CIRCUITS	90
H422 REMOVE OR REPLACE TRANSMITTER POWER OUTPUT TUBES	90
H406 ISOLATE TRANSMITTER POWER SUPPLY MALFUNCTIONS	90
H385 ADJUST MODULATORS	90
K510 ISOLATE COHO MALFUNCTIONS	90
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	90
H423 REMOVE OR REPLACE TRANSMITTER POWER SUPPLY COMPONENTS	90
G365 PERFORM INTERLOCK PROTECTIVE CIRCUIT OPERATIONAL CHECKS	90

TABLE A17

GROUP ID NUMBER AND TITLE: GRP375 - FIXED SEARCH RADAR MAINTENANCE
SUPERVISORS

NUMBER IN GROUP: 16 PERCENT OF CLUSTER: 10%

MAJCOM DISTRIBUTION: TAC (56%), PACAF (19%), AFCC (25%)

LOCATION: CONUS (38%), OVERSEAS (62%)

DAFSC DISTRIBUTION: 30352 (63%), 30372 (37%)

AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 132

AVERAGE MONTHS IN CAREER FIELD: 123

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
D149 CONDUCT OJT	100
A8 DETERMINE WORK PRIORITIES	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	100
E212 MAINTAIN OR MAKE ENTRIES IN MAINTENANCE LOGS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	100
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
C140 WRITE APR	100
G375 REMOVE OR REPLACE ELECTRONIC CHASSIS	100
G372 REMOVE OR REPLACE CABLES	100
H406 ISOLATE TRANSMITTER POWER SUPPLY MALFUNCTIONS	100
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	100
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
H402 ISOLATE TRANSMITTER CONTROL SYSTEM MALFUNCTIONS	100
K507 ISOLATE ANALOG TRIGGER TIMING GENERATOR MALFUNCTIONS	100
K483 ADJUST CRYSTAL MIXERS	100
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	100
H385 ADJUST MODULATORS	100
L559 ADJUST SWEEP GENERATING CIRCUITS	100
L557 ADJUST RANGE MARK CIRCUITS	100
K533 REMOVE OR REPLACE ANALOG RECEIVER CIRCUIT COMPONENTS	100
H384 ADJUST MODULATOR PROTECTIVE CIRCUITS	100
K511 ISOLATE CRYSTAL MIXER MALFUNCTIONS	100
G370 PERFORM SYSTEM GROUNDING CHECKS	100
G380 TEST INTERLOCK CIRCUITS	100
K537 REMOVE OR REPLACE CRYSTAL MIXER COMPONENTS	100

TABLE A18

GROUP ID NUMBER AND TITLE: GRP300 - HEIGHT FINDER RADAR MAINTENANCE
REPAIRMEN

NUMBER IN GROUP: 38 PERCENT OF CLUSTER: 24%

MAJCOM DISTRIBUTION: TAC (87%), AFCC (11%), OTHER (1%)

LOCATION: CONUS (84%), OVERSEAS (16%)

DAFSC DISTRIBUTION: 30332 (39%), 30352 (61%)

AVERAGE GRADE: E-3 AVERAGE MONTHS IN SERVICE: 28

AVERAGE MONTHS IN CAREER FIELD: 24

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
L576 PERFORM RHI OPERATIONAL CHECKS	100
H383 ADJUST MODULATOR CONTROL CIRCUITS	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	97
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	97
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	97
L557 ADJUST RANGE MARK CIRCUITS	87
I426 ADJUST ANTENNA CONTROL SYSTEMS	97
G380 TEST INTERLOCK CIRCUITS	97
L568 ISOLATE RANGE MARK CIRCUIT MALFUNCTIONS	97
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	94
G359 PERFORM CORROSION CONTROL	94
I441 PERFORM ANTENNA DRIVE AND CONTROL SYSTEM OPERATIONAL CHECKS	94
H403 ISOLATE TRANSMITTER COOLING SYSTEM MALFUNCTIONS	
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	94
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	92
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	92
K483 ADJUST CRYSTAL MIXERS	92
L549 ADJUST ANGLE MARK CIRCUITS	92
K481 ADJUST AUTOMATIC FREQUENCY CONTROL (AFC) CIRCUITS	92
L578 REMOVE OR REPLACE ANGLE MARK CIRCUIT COMPONENTS	92
I431 ADJUST ELEVATION DATA GENERATORS	92
H398 ISOLATE MODULATOR MALFUNCTIONS	92
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	92
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	92
G345 CALCULATE REFRACTIVE INDEXES	89
G365 PERFORM INTERLOCK PROTECTIVE CIRCUIT OPERATIONAL CHECKS	89
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	89
L554 ADJUST HEIGHT DISPLAYS	86

TABLE A19

GROUP ID NUMBER AND TITLE: GRP330 - HEIGHT FINDER RADAR MAINTENANCE
SUPERVISOR

NUMBER IN GROUP: 7

PERCENT OF CLUSTER: 4%

MAJCOM DISTRIBUTION: TAC (86%), AFCC (14%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30352 (57%), 30372 (43%)

AVERAGE GRADE: E-5

AVERAGE MONTHS IN SERVICE: 138

AVERAGE MONTHS IN CAREER FIELD: 111

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
B81 SUPERVISE APPRENTICE AC&W RADAR SPECIALISTS (30332)	100
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
D149 CONDUCT OJT	100
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	100
C140 WRITE APR	100
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
G359 PERFORM CORROSION CONTROL	100
F333 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
A8 DETERMINE WORK PRIORITIES	100
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
F334 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	100
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	100
I426 ADJUST ANTENNA CONTROL SYSTEMS	100
L554 ADJUST HEIGHT DISPLAYS	100
I427 ADJUST ANTENNA DRIVE SYSTEMS	100
G367 PERFORM POWER DISTRIBUTION SYSTEM OPERATIONAL CHECKS	100
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	100
L568 ISOLATE RANGE MARK CIRCUIT MALFUNCTIONS	100
G366 PERFORM ORGANIZATIONAL MAINTENANCE OF TEST EQUIPMENT	100
H383 ADJUST MODULATOR CONTROL CIRCUITS	100
E232 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100
L557 ADJUST RANGE MARK CIRCUITS	100
G372 REMOVE OR REPLACE CABLES	100
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	100
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	85

TABLE A20

GROUP ID NUMBER AND TITLE: GRP297 - AN/FPS-91 RADAR REPAIRMEN

NUMBER IN GROUP: 14

PERCENT OF CLUSTER: 9%

MAJCOM DISTRIBUTION: TAC (100%)

LOCATION: CONUS (93%), OVERSEAS (7%)

DAFSC DISTRIBUTION: 30332 (21%), 30352 (79%)

AVERAGE GRADE: E-3

AVERAGE MONTHS IN SERVICE: 28

AVERAGE MONTHS IN CAREER FIELD: 25

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
G359 PERFORM CORROSION CONTROL	100
G372 REMOVE OR REPLACE CABLES	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	92
K483 ADJUST CRYSTAL MIXERS	92
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	92
G349 FABRICATE COAXIAL CABLES	92
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	92
N611 ADJUST GAIN TIME CONSTANT (GTC) CIRCUITS	92
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	92
K482 ADJUST COHERENT OSCILLATORS (COHO)	92
K498 ADJUST STABLE LOCAL OSCILLATORS (STALO)	92
L549 ADJUST ANGLE MARK CIRCUITS	92
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	85
H390 ADJUST TRANSMITTER OUTPUT TUBES	85
H394 ADJUST TRANSMITTER RADIO FREQUENCY (RF) AMPLIFIERS, OTHER THAN OUTPUT TUBES	85
H422 REMOVE OR REPLACE TRANSMITTER POWER OUTPUT TUBES	85
K477 ADJUST ANALOG MOVING TARGET INDICATOR (MTI) RECEIVERS	85
K491 ADJUST INTERMEDIATE FREQUENCY (IF) AMPLIFIERS	85
K492 ADJUST INTERMEDIATE FREQUENCY (IF) PREAMPLIFIERS	85
L557 ADJUST RANGE MARK CIRCUITS	85
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	78
N636 PERFORM SIF SYSTEM OPERATIONAL CHECKS	78
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	78
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	78
H393 ADJUST TRANSMITTER POWER SUPPLIES	78
L579 REMOVE OR REPLACE CRT	78

TABLE A21

GROUP ID NUMBER AND TITLE: GRP459 - AN/FPS-91 RADAR TRANSMITTER
SPECIALISTS

NUMBER IN GROUP: 6 PERCENT OF CLUSTER: 4%

MAJCOM DISTRIBUTION: TAC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30332 (67%), 30352 (33%)

AVERAGE GRADE: E-3 AVERAGE MONTHS IN SERVICE: 17

AVERAGE MONTHS IN CAREER FIELD: 14

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
H414 REMOVE OR REPLACE MODULATOR COMPONENTS	100
H422 REMOVE OR REPLACE TRANSMITTER POWER OUTPUT TUBES	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
H390 ADJUST TRANSMITTER OUTPUT TUBES	100
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	100
H383 ADJUST MODULATOR CONTROL CIRCUITS	100
H403 ISOLATE TRANSMITTER COOLING SYSTEM MALFUNCTIONS	100
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	100
H406 ISOLATE TRANSMITTER POWER SUPPLY MALFUNCTIONS	100
H385 ADJUST MODULATORS	100
H398 ISOLATE MODULATOR MALFUNCTIONS	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	
H417 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM COMPONENTS	100
G372 REMOVE OR REPLACE CABLES	100
H425 REMOVE OR REPLACE TRANSMITTER PULSE TRANSFORMERS	100
K536 REMOVE OR REPLACE COHO COMPONENTS	100
K410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	83
G359 PERFORM CORROSION CONTROL	83
H419 REMOVE OR REPLACE TRANSMITTER INTERMEDIATE RF AMPLIFIER COMPONENTS	83
H384 ADJUST MODULATOR PROTECTIVE CIRCUITS	83
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	83
H408 ISOLATE TRANSMITTER RF AMPLIFIER MALFUNCTIONS	83
H423 REMOVE OR REPLACE TRANSMITTER POWER SUPPLY COMPONENTS	83
G357 ISOLATE POWER SUPPLY MALFUNCTIONS OTHER THAN SOLID-STATE	83
H397 ISOLATE MODULATOR CONTROL CIRCUIT MALFUNCTIONS	83
H400 ISOLATE POWER OUTPUT CIRCUIT MALFUNCTIONS	83
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	83
K482 ADJUST COHERENT OSCILLATORS (COHO)	83
K547 REMOVE OR REPLACE STALO COMPONENTS	83

TABLE A22

GROUP ID NUMBER AND TITLE: GRP142 - TACTICAL RADAR MAINTENANCE PERSONNEL
 NUMBER IN GROUP: 161 PERCENT OF SAMPLE: 21%
 MAJCOM DISTRIBUTION: TAC (54%), USAFE (33%), AFCC (7%), PACAF (5%)
 LOCATION: CONUS (60%), OVERSEAS (40%)
 DAFSC DISTRIBUTION: 30332 (22%), 30352 (66%), 30372 (12%)
 AVERAGE GRADE: E-4 AVERAGE MONTHS IN SERVICE: 64
 AVERAGE MONTHS IN CAREER FIELD: 56

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G372 REMOVE OR REPLACE CABLES	98
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	97
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	96
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	96
H412 PRESSURIZE SF6 TANKS	95
I438 LEVEL ANTENNA PEDESTALS	95
G349 FABRICATE COAXIAL CABLES	95
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	94
H396 DEPRESSURIZE SF6 TANKS	94
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	93
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	93
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	93
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	93
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	93
L552 ADJUST CURSOR CIRCUITS	93
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	93
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	93
L551 ADJUST CRT PROTECTION CIRCUITS	92
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	91
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	91
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	90
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	90
K528 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING BUILT-IN TEST EQUIPMENT (BITE)	90
G359 PERFORM CORROSION CONTROL	90
H417 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM COMPONENTS	90
L559 ADJUST SWEEP GENERATING CIRCUITS	90
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	89
H403 ISOLATE TRANSMITTER COOLING SYSTEM MALFUNCTIONS	89
G344 ADJUST SOLID-STATE POWER SUPPLIES	88
L557 ADJUST RANGE MARK CIRCUITS	87

TABLE A23

GROUP ID NUMBER AND TITLE: GRP327 - TACTICAL RADAR REPAIRMEN
 NUMBER IN GROUP: 99 PERCENT OF CLUSTER: 61%
 MAJCOM DISTRIBUTION: TAC (54%), USAF (34%), PACAF (7%), OTHER (5%)
 LOCATION: CONUS (56%), OVERSEAS (44%)
 DAFSC DISTRIBUTION: 30332 (23%), 30352 (71%), 30372 (6%)
 AVERAGE GRADE: E-3, E-4 AVERAGE MONTHS IN SERVICE: 50
 AVERAGE MONTHS IN CAREER FIELD: 43

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G372 REMOVE OR REPLACE CABLES	97
H412 PRESSURIZE SF6 TANKS	97
I438 LEVEL ANTENNA PEDESTALS	97
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	97
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	96
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	96
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	96
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	96
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	96
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	95
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	95
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	95
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	95
L552 ADJUST CURSOR CIRCUITS	95
L551 ADJUST CRT PROTECTION CIRCUITS	95
H396 DEPRESSURIZE SF6 TANKS	95
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	94
G349 FABRICATE COAXIAL CABLES	94
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	94
H417 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM COMPONENTS	94
H403 ISOLATE TRANSMITTER COOLING SYSTEM MALFUNCTIONS	94
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	93
G359 PERFORM CORROSION CONTROL	93
F283 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	92
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	92
L559 ADJUST SWEEP GENERATING CIRCUITS	91
Q767 PACK RADAR EQUIPMENT FOR DEPLOYMENT OR REDEPLOYMENT	90
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	90
K528 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING BUILT-IN TEST EQUIPMENT (BITE)	90
L557 ADJUST RANGE MARK CIRCUITS	90

TABLE A24

GROUP ID NUMBER AND TITLE: GRP355 - TACTICAL RADAR MAINTENANCE SUPERVISORS
 NUMBER IN GROUP: 24 PERCENT OF CLUSTER: 15%
 MAJCOM DISTRIBUTION: USAF (50%), TAC (38%), AFCC (8%), OTHER (4%)
 LOCATION: CONUS (42%), OVERSEAS (58%)
 DAFSC DISTRIBUTION: 30332 (4%), 30352 (50%), 30372 (46%)
 AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 145
 AVERAGE MONTHS IN CAREER FIELD: 135

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	100
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	100
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	100
A8 DETERMINE WORK PRIORITIES	100
F281 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	100
N636 PERFORM SIF SYSTEM OPERATIONAL CHECKS	100
H403 ISOLATE TRANSMITTER COOLING SYSTEM MALFUNCTIONS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	100
G372 REMOVE OR REPLACE CABLES	100
G375 REMOVE OR REPLACE ELECTRONIC CHASSIS	100
K487 ADJUST DIGITAL MTI RECEIVERS	100
H418 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM FLUIDS	100
J459 ISOLATE WAVE-GUIDE PRESSURIZING SYSTEM MALFUNCTIONS	100
J471 REMOVE OR REPLACE WAVE-GUIDE PRESSURIZING SYSTEM COMPONENTS	100
H417 REMOVE OR REPLACE TRANSMITTER COOLING SYSTEM COMPONENTS	100
K523 ISOLATE SIDE LOBE RECEIVER CIRCUIT MALFUNCTIONS	100
K524 ISOLATE SIGNAL DISTRIBUTION CIRCUIT MALFUNCTIONS	100
L570 ISOLATE SWEEP GENERATING CIRCUIT MALFUNCTIONS	100
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	100
L552 ADJUST CURSOR CIRCUITS	100
K496 ADJUST SIDE LOBE RECEIVER CIRCUITS	100
N611 ADJUST GAIN TIME CONSTANT (GTC) CIRCUITS	100
G356 ISOLATE POWER DISTRIBUTION SYSTEM MALFUNCTIONS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	95
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	95
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	95
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	95
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	95

TABLE A25

GROUP ID NUMBER AND TITLE: GRP371 - TACTICAL RADAR TRAINER MAINTENANCE
SUPERVISORS

NUMBER IN GROUP: 8 PERCENT OF CLUSTER: 5%

MAJCOM DISTRIBUTION: TAC (63%), USAF (37%)

LOCATION: CONUS (63%), OVERSEAS (37%)

DAFSC DISTRIBUTION: 30332 (25%), 30352 (62%), 30372 (13%)

AVERAGE GRADE: E-4, E-5 AVERAGE MONTHS IN SERVICE: 75

AVERAGE MONTHS IN CAREER FIELD: 50

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
P701 LOAD FILM IN RADAR TRAINERS	100
P669 ADJUST RADAR TRAINER AIRCRAFT CHARACTERISTICS	100
P702 PERFORM OPERATIONAL CHECKS OF RADAR TRAINERS	100
P680 ADJUST RADAR TRAINER POWER SUPPLIES	100
P672 ADJUST RADAR TRAINER COMPARATORS	100
P681 ADJUST RADAR TRAINER SERVO AMPLIFIERS	100
P697 ISOLATE RADAR TRAINER SERVO AMPLIFIER MALFUNCTIONS	100
P676 ADJUST RADAR TRAINER FILM DRIVE CIRCUITS	100
P682 ADJUST RADAR TRAINER SYNCHRO CIRCUITS	100
P675 ADJUST RADAR TRAINER CRT PROTECTION CIRCUITS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
P698 ISOLATE RADAR TRAINER SYNCHRO CIRCUIT MALFUNCTIONS	100
P677 ADJUST RADAR TRAINER GENERATORS	100
P671 ADJUST RADAR TRAINER CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	100
P678 ADJUST RADAR TRAINER IDENTIFICATION FRIEND OR FOE (IFF) CODER SYSTEMS	100
P714 REMOVE OR REPLACE RADAR TRAINER SERVO AMPLIFIERS	100
P670 ADJUST RADAR TRAINER BUFFERS	100
P715 REMOVE OR REPLACE RADAR TRAINER SYNCHRO CIRCUIT COMPONENTS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
P696 ISOLATE RADAR TRAINER POWER SUPPLY MALFUNCTIONS	100
G372 REMOVE OR REPLACE CABLES	100
P685 ISOLATE RADAR TRAINER AIRCRAFT CHARACTERISTIC MALFUNCTIONS	100
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	100
P684 ISOLATE RADAR TRAINER ACTOR MALFUNCTIONS	100
P713 REMOVE OR REPLACE RADAR TRAINER POWER SUPPLY COMPONENTS	100
G343 ADJUST POWER SUPPLIES OTHER THAN SOLID-STATE POWER SUPPLIES	100
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	100
P687 ISOLATE RADAR TRAINER COMPARATOR MALFUNCTIONS	100
P700 ISOLATE RADAR TRAINER VIDEO CIRCUIT MALFUNCTIONS	100

TABLE A26

GROUP ID NUMBER AND TITLE: GRP321 - TACTICAL RADAR TRAINER REPAIRMEN

NUMBER IN GROUP: 6

PERCENT OF CLUSTER: 4%

MAJCOM DISTRIBUTION: TAC (83%), USAFE (17%)

LOCATION: CONUS (83%), OVERSEAS (17%)

DAFSC DISTRIBUTION: 30332 (17%), 30352 (83%)

AVERAGE GRADE: E-3

AVERAGE MONTHS IN SERVICE: 20

AVERAGE MONTHS IN CAREER FIELD: 18

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
P680 ADJUST RADAR TRAINER POWER SUPPLIES	100
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	100
G359 PERFORM CORROSION CONTROL	100
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
J472 REMOVE OR REPLACE WAVE-GUIDE SECTIONS	100
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	100
G374 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS, SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	100
P702 PERFORM OPERATIONAL CHECKS OF RADAR TRAINERS	100
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
Q722 ASSEMBLE OR DISASSEMBLE MOBILE RADAR EQUIPMENT FOR MISSION DEPLOYMENTS	100
P701 LOAD FILM IN RADAR TRAINERS	100
Q782 TEAR DOWN MOBILE ANTENNAS	100
G372 REMOVE OR REPLACE CABLES	100
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	100
P681 ADJUST RADAR TRAINER SERVO AMPLIFIERS	100
P704 REMOVE OR REPLACE RADAR TRAINER AIRCRAFT CHARACTERISTIC MODULES OR COMPONENTS	100
I438 LEVEL ANTENNA PEDESTALS	100
Q738 ERECT MOBILE ANTENNAS	100
L550 ADJUST CATHODE RAY TUBE (CRT) DEFLECTION CIRCUITS	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
L557 ADJUST RANGE MARK CIRCUITS	100
L552 ADJUST CURSOR CIRCUITS	100
L551 ADJUST CRT PROTECTION CIRCUITS	100
I441 PERFORM ANTENNA DRIVE AND CONTROL SYSTEM OPERATIONAL CHECKS	100
P682 ADJUST RADAR TRAINER SYNCHRO CIRCUITS	100
H412 PRESSURIZE SF6 TANKS	100
G377 REMOVE OR REPLACE SOLID-STATE DEVICES	100
H396 DEPRESSURIZE SF6 TANKS	100
H383 ADJUST MODULATOR CONTROL CIRCUITS	100
H409 PERFORM RADAR TRANSMITTER INSULATING OIL CHECKS	100

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AIRCRAFT CONTROL AND WARNING RADAR CAREER LADDER(U) AIR
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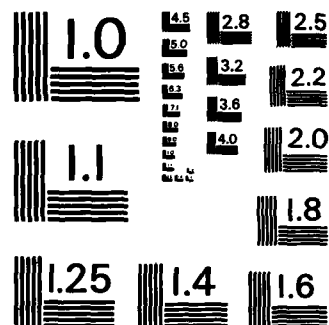
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE A27

GROUP ID NUMBER AND TITLE: GRP293 - TACTICAL RADAR CREW MEMBERS

NUMBER IN GROUP: 12

PERCENT OF SAMPLE: 2%

MAJCOM DISTRIBUTION: TAC (75%), USAFE (25%)

LOCATION: CONUS (75%), OVERSEAS (25%)

DAFSC DISTRIBUTION: 30332 (75%), 30352 (25%)

AVERAGE GRADE: E-3

AVERAGE MONTHS IN SERVICE: 20

AVERAGE MONTHS IN CAREER FIELD: 17

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	100
Q782 TEAR DOWN MOBILE ANTENNAS	100
Q722 ASSEMBLE OR DISASSEMBLE MOBILE RADAR EQUIPMENT FOR MISSION DEPLOYMENTS	100
G359 PERFORM CORROSION CONTROL	100
Q785 TEAR DOWN, INSPECT, CLEAN, AND REASSEMBLE M-16 RIFLES	100
Q720 ANCHOR RADAR EQUIPMENT	100
G372 REMOVE OR REPLACE CABLES	100
Q738 ERECT MOBILE ANTENNAS	91
I439 LUBRICATE ANTENNA SYSTEM COMPONENTS	91
Q767 PACK RADAR EQUIPMENT FOR DEPLOYMENT OR REDEPLOYMENT	91
Q743 FIRE M-16 RIFLES	91
K487 ADJUST DIGITAL MTI RECEIVERS	91
H412 PRESSURIZE SF6 TANKS	91
H396 DEPRESSURIZE SF6 TANKS	91
G360 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING BUILDINGS	91
K486 ADJUST DIGITAL LINEAR RECEIVERS	91
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	83
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	83
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	83
K528 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING BUILT-IN TEST EQUIPMENT (BITE)	83
Q740 ERECT TENTS	83
L552 ADJUST CURSOR CIRCUITS	83
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	83
G373 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	83
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	83
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	83
Q771 PERFORM PERSONAL HYGIENE TECHNIQUES UNDER FIELD CONDITIONS	75
H411 PERFORM TRANSMITTER STATUS CONTROL SYSTEM OPERATIONAL CHECKS	75
Q766 PACK INDIVIDUAL MOBILITY EQUIPMENT FOR DEPLOYMENTS	75

TABLE A28

GROUP ID NUMBER AND TITLE: GRP195 - ENGINEERING INSTALLATION TEAM MEMBERS

NUMBER IN GROUP: 6

PERCENT OF SAMPLE: 17

MAJCOM DISTRIBUTION: AFCC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30332 (17%), 30352 (83%)

AVERAGE GRADE: E-3

AVERAGE MONTHS IN SERVICE: 29

AVERAGE MONTHS IN CAREER FIELD: 21

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
G372 REMOVE OR REPLACE CABLES	100
G382 VERIFY CABLE TERMINATORS	100
G379 TERMINATE CABLES	100
G381 TORQUE MISCELLANEOUS HARDWARE, SUCH AS SCREWS OR BOLTS	100
Q754 INSTALL OR REMOVE RADAR OR AUXILIARY EQUIPMENT	100
G349 FABRICATE COAXIAL CABLES	100
Q750 INSTALL OR REMOVE CABLE SUPPORT SYSTEMS	100
G352 FABRICATE POWER CABLES	100
G362 PERFORM GENERAL SOLDERING, OTHER THAN PRINTED CIRCUIT BOARDS	100
G351 FABRICATE MINOR HARDWARE, SUCH AS CLAMPS, BRACKETS, OR BRACES	100
G353 FABRICATE SEMIRIGID CABLES	100
Q751 INSTALL OR REMOVE FIXED-SITE ANTENNAS	83
I448 REMOVE OR REPLACE ANTENNA SLIP RING ASSEMBLIES	83
I438 LEVEL ANTENNA PEDESTALS	83
I449 REMOVE OR REPLACE ANTENNA TILT MECHANISMS	83
G350 FABRICATE MINI-COAXIAL CABLES	83
G348 FABRICATE CABLE HARNESES	83
I429 ADJUST ANTENNA TILT	83
G346 CONSTRUCT CABLE TROUGHS	83
G371 READ AND INTERPRET EQUIPMENT TECHNICAL MANUALS	83
Q735 DRILL AND TAP HOLES FOR MOUNTING EQUIPMENT	83
I450 REMOVE OR REPLACE ELEVATION DATA GENERATORS	83
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	83
Q759 INVENTORY SCHEME MATERIALS	66
I445 REMOVE OR REPLACE ANTENNA PEDESTALS	66
I447 REMOVE OR REPLACE ANTENNA SECTIONS	66
Q757 INSTALL OR REMOVE SYSTEM GROUNDS	66
I446 REMOVE OR REPLACE ANTENNA REFLECTORS	66
C136 PERFORM VEHICLE INSPECTIONS	66
I427 ADJUST ANTENNA DRIVE SYSTEMS	66

TABLE A29

GROUP ID NUMBER AND TITLE: GRP014 - RADAR EVALUATION PERSONNEL
 NUMBER IN GROUP: 26 PERCENT OF SAMPLE: 3%
 MAJCOM DISTRIBUTION: AFCC (62%), TAC (15%), USAF (8%), OTHER (15%)
 LOCATION: CONUS (89%), OVERSEAS (11%)
 DAFSC DISTRIBUTION: 30352 (38%), 30372 (62%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 172
 AVERAGE MONTHS IN CAREER FIELD: 151

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
R793 EVALUATE RADARS AND ASSOCIATED EQUIPMENT	69
R790 EVALUATE FEDERAL AVIATION ADMINISTRATION (FAA) AND CONTRACT RADARS	61
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	61
C93 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	57
R791 EVALUATE PERFORMANCE OF NEWLY INSTALLED EQUIPMENT	57
B84 WRITE CORRESPONDENCE OR MESSAGES	46
B50 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	42
C85 ANALYZE TRENDS IN SYSTEM MALFUNCTIONS	38
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	38
R794 EVALUATE SOLAR COLLECTION AND REDUCTION DATA	34
R788 EVALUATE ANNULAR SUBCLUTTER VISIBILITY PHOTOGRAPHS	34
R789 EVALUATE CLUTTER PHOTOGRAPHS	34
R796 PERFORM SOLAR BORESIGHT AND AZIMUTH ORIENTATION CHECKS	30
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	30
C127 PERFORM EQUIPMENT INSPECTIONS	30
E267 REVIEW CORRESPONDENCE	30
R797 PREPARE SOLAR COLLECTION AND REDUCTION REPORTS	30
R792 EVALUATE PROTOTYPE OR MODIFIED EQUIPMENT	30
R787 DEVELOP EVALUATION OPERATING INSTRUCTIONS (EOI)	30
E214 MAINTAIN SECURITY FORMS ON SAFES, RECORDS, OR ROOMS	30
A15 DEVELOP WORK METHODS OR PROCEDURES	30
C87 CONDUCT MAINTENANCE INSPECTIONS	26
C725 CONDUCT SAGE TESTING	26
C113 EVALUATE TECHNICAL PERFORMANCE OF PERSONNEL	26
Q726 CONSOLIDATE SAGE TESTING RESULTS	26
A35 PREPARE BRIEFINGS	26
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	23
Q719 ANALYZE SEMIAUTOMATIC GROUND EQUIPMENT (SAGE) TESTING RESULTS	23
B55 COORDINATE FLIGHT CHECKS OF INSTALLED EQUIPMENT WITH CHIEF OF MAINTENANCE	23
C99 EVALUATE INSPECTION OR MAINTENANCE REPORTS	23

TABLE A30

GROUP ID NUMBER AND TITLE: GRP175 - ELECTRONIC SYSTEMS ANALYST
 NUMBER IN GROUP: 5 PERCENT OF CLUSTER: 19%
 MAJCOM DISTRIBUTION: AFCC (100%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30352 (20%), 30372 (80%)
 AVERAGE GRADE: E-6 AVERAGE MONTHS IN SERVICE: 202
 AVERAGE MONTHS IN CAREER FIELD: 156

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
R793 EVALUATE RADARS AND ASSOCIATED EQUIPMENT	100
Q725 CONDUCT SAGE TESTING	100
Q726 CONSOLIDATE SAGE TESTING RESULTS	100
R790 EVALUATE FEDERAL AVIATION ADMINISTRATION (FAA) AND CONTRACT RADARS	100
B70 IMPLEMENT SELF-INSPECTION PROGRAMS	100
Q719 ANALYZE SEMIAUTOMATIC GROUND EQUIPMENT (SAGE) TESTING RESULTS	80
C85 ANALYZE TRENDS IN SYSTEM MALFUNCTIONS	80
R791 EVALUATE PERFORMANCE OF NEWLY INSTALLED EQUIPMENT	80
B55 COORDINATE FLIGHT CHECKS OF INSTALLED EQUIPMENT WITH CHIEF OF MAINTENANCE	80
B50 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	80
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	80
A35 PREPARE BRIEFINGS	80
E259 PREPARE RECORDS OR GRAPHS, OTHER THAN TRAINING	80
B84 WRITE CORRESPONDENCE OR MESSAGES	80
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	80
E214 MAINTAIN SECURITY FORMS ON SAFES, RECORDS, OR ROOMS	80
C93 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	60
C137 PREPARE INSPECTION TREND ANALYSIS	60
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	60
C134 PERFORM SELF-INSPECTIONS	60
B51 CONDUCT BRIEFINGS	60
E265 REPORT COMMUNICATION OUTAGES	60
A15 DEVELOP WORK METHODS OR PROCEDURES	60
B61 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OF CHARTS	60
A17 DRAFT DIRECTIVE SUPPLEMENTS OR CHANGES	60
A23 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	60
R792 EVALUATE PROTOTYPE OR MODIFIED EQUIPMENT	40
B68 IMPLEMENT SAFETY PROGRAMS	40
Q724 CONDUCT OPERATIONAL TESTS OF NEWLY INSTALLED EQUIPMENT	40
E267 REVIEW CORRESPONDENCE	40

TABLE A31

GROUP ID NUMBER AND TITLE: GRP391 - RADAR EVALUATION SPECIALISTS
 NUMBER IN GROUP: 5 PERCENT OF CLUSTER: 19%
 MAJCOM DISTRIBUTION: AFCC (100%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30352 (80%), 30372 (20%)
 AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 138
 AVERAGE MONTHS IN CAREER FIELD: 115

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
R791 EVALUATE PERFORMANCE OF NEWLY INSTALLED EQUIPMENT	100
R793 EVALUATE RADARS AND ASSOCIATED EQUIPMENT	100
R796 PERFORM SOLAR BORESIGHT AND AZIMUTH ORIENTATION CHECKS	100
R797 PREPARE SOLAR COLLECTION AND REDUCTION REPORTS	100
R790 EVALUATE FEDERAL AVIATION ADMINISTRATION (FAA) AND CONTRACT RADARS	100
R794 EVALUATE SOLAR COLLECTION AND REDUCTION DATA	100
L576 PERFORM RHI OPERATIONAL CHECKS	100
L575 PERFORM PLAN POSITION INDICATOR (PPI) OPERATIONAL CHECKS	100
K529 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING CONVENTIONAL TEST EQUIPMENT	100
K530 PERFORM SIGNAL DISTRIBUTION SYSTEM OPERATIONAL CHECKS	100
R787 DEVELOP EVALUATION OPERATING INSTRUCTIONS (EOI)	100
R788 EVALUATE ANNULAR SUBCLUTTER VISIBILITY PHOTOGRAPHS	100
R789 EVALUATE CLUTTER PHOTOGRAPHS	100
I441 PERFORM ANTENNA DRIVE AND CONTROL SYSTEM OPERATIONAL CHECKS	80
L573 PERFORM HEIGHT FINDER OPERATOR DUTIES, SUCH AS BISECTING HEIGHT TARGETS ON RHI DISPLAYS	80
H410 PERFORM RADAR TRANSMITTER OPERATIONAL CHECKS	80
R792 EVALUATE PROTOTYPE OR MODIFIED EQUIPMENT	80
G368 PERFORM POWER SUPPLY OPERATIONAL CHECKS	80
I442 PERFORM ANTENNA ORIENTATIONS, OTHER THAN SOLAR BORESIGHT AND AZIMUTH ORIENTATIONS	60
N635 PERFORM FACILITY ROUTINES WITH THE AN/FYQ-47 COMMON DIGITIZERS	60
G345 CALCULATE REFRACTIVE INDEXES	60
I440 MEASURE ANTENNA CONTOURS	60
K528 PERFORM RADAR RECEIVING SYSTEM OPERATIONAL CHECKS USING BUILT-IN TEST EQUIPMENT (BITE)	60
G382 VERIFY CABLE TERMINATORS	60
L574 PERFORM OPERATIONAL CHECKS OF MONITOR OR MAINTENANCE CONSOLES	60
C93 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	60
C123 PERFORM ACCEPTANCE INSPECTIONS	60
D149 CONDUCT OJT	60
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	60
A15 DEVELOP WORK METHODS OR PROCEDURES	60

TABLE A32

GROUP ID NUMBER AND TITLE: GRP214 - JOB CONTROLLERS

NUMBER IN GROUP: 6

PERCENT OF SAMPLE: 17

MAJCOM DISTRIBUTION: TAC (66%), AFCC (17%), USAF (17%)

LOCATION: CONUS (83%), OVERSEAS 17%

DAFSC DISTRIBUTION: 30352 (83%), 30372 (17%)

AVERAGE GRADE: E-4

AVERAGE MONTHS IN SERVICE: 94

AVERAGE MONTHS IN CAREER FIELD: 62

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
E280 UPDATE MMICS	100
E215 MAINTAIN STATUS BOARDS OR JOB CONTROL BOARDS	100
B51 CONDUCT BRIEFINGS	83
E270 REVIEW MAINTENANCE MANAGEMENT INFORMATION CONTROL SYSTEMS (MMICS) OUTPUT DATA	66
A35 PREPARE BRIEFINGS	66
E189 DOCUMENT CANNIBALIZATION	66
E216 MAINTAIN STATUS RECORDS OR MAINTENANCE REQUIREMENT RECORDS	50
E265 REPORT COMMUNICATION OUTAGES	50
A8 DETERMINE WORK PRIORITIES	50
F334 REVIEW STATUS OF AWAITING PARTS (AWP) EQUIPMENT	33
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	33
G361 PERFORM GENERAL HOUSEKEEPING PROCEDURES	33
D149 CONDUCT OJT	33
B77 ORIENT NEWLY ASSIGNED PERSONNEL	33
B73 INITIATE FOLLOW-UP ACTIONS ON WORK IN PROGRESS	16
E193 ESTIMATE JOB DURATIONS	16
F341 VALIDATE MISSION CAPABILITY (MICAP) REQUIREMENTS	16
Q733 DISPATCH MAINTENANCE PERSONNEL	16
E211 MAINTAIN MASTER EQUIPMENT IDENTIFICATION LISTINGS	16
E187 DETERMINE AND ASSIGN CLASSIFICATION OF REPORTS	16
F333 REVIEW STATUS OF AWAITING MAINTENANCE (AWM) PARTS	16
E235 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	16
A44 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	16
B75 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	16
C138 REVIEW MAINTENANCE DATA COLLECTION (MDC) FORMS	16
F330 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	16
F290 ESTABLISH SUPPLY REQUIREMENTS	16
B81 SUPERVISE APPRENTICE AC&W RADAR SPECIALISTS (30332)	16
C140 WRITE APR	16

TABLE A33

GROUP ID NUMBER AND TITLE: GRP040 - INSTRUCTOR PERSONNEL
 NUMBER IN GROUP: 33 PERCENT OF SAMPLE: 4%
 MAJCOM DISTRIBUTION: ATC (94%), AFCC (3%), TAC (3%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30352 (67%), 30372 (33%)
 AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 102
 AVERAGE MONTHS IN CAREER FIELD: 96

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
D144 ADMINISTER OR SCORE TESTS	90
D152 CONDUCT TECHNICAL SCHOOL CLASSROOM TRAINING	87
D177 PREPARE LESSON PLANS	87
D158 DEVELOP FORMAL COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	69
D169 EVALUATE PROGRESS OF TECHNICAL SCHOOL STUDENTS	66
D181 WRITE TEST QUESTIONS	63
D161 DEVELOP PERFORMANCE TESTS	63
D163 DEVELOP TRAINING AIDS	57
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	51
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	48
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	48
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	48
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	45
D176 PREPARE INSTRUCTION TRAINING AREAS OR FACILITIES	42
D178 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	42
D150 CONDUCT SAFETY TRAINING	39
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	30
D170 EVALUATE TRAINING METHODS OR TECHNIQUES	30
D145 ADVISE UNIT STAFF PERSONNEL ON TRAINING MATTERS	30
C134 PERFORM SELF-INSPECTIONS	30
D148 BRIEF PERSONNEL ON TRAINING METHODS OR PROCEDURES	27
E204 MAINTAIN COUNSELING FORMS	24
D162 DEVELOP TECHNICAL SCHOOL COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	24
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	24
D175 PREPARE COURSE CONTROL DOCUMENTS	21
E219 MAINTAIN TECHNICAL ORDER FILES	18
D151 CONDUCT SECURITY TRAINING	18
D174 PREPARE CHANGES TO COURSE SUMMARY DOCUMENTS AND COURSE OBJECTIVE DOCUMENTS	18
C113 EVALUATE TECHNICAL PERFORMANCE OF PERSONNEL	15
F312 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	15

TABLE A34

GROUP ID NUMBER AND TITLE: GRP259 - AC&W RADAR COURSE INSTRUCTORS
 NUMBER IN GROUP: 12 PERCENT OF CLUSTER: 36%
 MAJCOM DISTRIBUTION: ATC (100%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30352 (75%), 30372 (25%)
 AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 100
 AVERAGE MONTHS IN CAREER FIELD: 96

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
D177 PREPARE LESSON PLANS	100
D152 CONDUCT TECHNICAL SCHOOL CLASSROOM TRAINING	91
D144 ADMINISTER OR SCORE TESTS	91
D181 WRITE TEST QUESTIONS	91
D158 DEVELOP FORMAL COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	91
D161 DEVELOP PERFORMANCE TESTS	91
D163 DEVELOP TRAINING AIDS	83
D169 EVALUATE PROGRESS OF TECHNICAL SCHOOL STUDENTS	75
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	58
D178 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	50
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	50
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	50
C134 PERFORM SELF-INSPECTIONS	33
D162 DEVELOP TECHNICAL SCHOOL COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	25
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	25
D150 CONDUCT SAFETY TRAINING	25
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	25
D145 ADVISE UNIT STAFF PERSONNEL ON TRAINING MATTERS	25
D176 PREPARE INSTRUCTION TRAINING AREAS OR FACILITIES	16
E219 MAINTAIN TECHNICAL ORDER FILES	16
D151 CONDUCT SECURITY TRAINING	16
D170 EVALUATE TRAINING METHODS OR TECHNIQUES	16
B72 IMPLEMENT UNIT EMERGENCY OR DISASTER PLANS	16
A35 PREPARE BRIEFINGS	16
A34 PLAN UNIT EMERGENCY PROCEDURES	16
A39 REVIEW UNIT EMERGENCY OR DISASTER PLANS	16
A31 PLAN SAFETY PROGRAMS	16
B68 IMPLEMENT SAFETY PROGRAMS	16
D159 DEVELOP MOBILIZATION TRAINING	8
D171 MAINTAIN STUDY REFERENCE FILES	8

TABLE A35

GROUP ID NUMBER AND TITLE: GRP202 - ELECTRONIC PRINCIPLES INSTRUCTORS

NUMBER IN GROUP: 6

PERCENT OF CLUSTER: 18%

MAJCOM DISTRIBUTION: ATC (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30352 (83%), 30372 (17%)

AVERAGE GRADE: E-4, E-5 AVERAGE MONTHS IN SERVICE: 98

AVERAGE MONTHS IN CAREER FIELD: 76

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	100
D152 CONDUCT TECHNICAL SCHOOL CLASSROOM TRAINING	83
D177 PREPARE LESSON PLANS	83
D144 ADMINISTER OR SCORE TESTS	83
D169 EVALUATE PROGRESS OF TECHNICAL SCHOOL STUDENTS	50
D176 PREPARE INSTRUCTION TRAINING AREAS OR FACILITIES	50
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	50
D150 CONDUCT SAFETY TRAINING	50
D158 DEVELOP FORMAL COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	50
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	33
E236 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAGS)	33
D165 DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	16
D149 CONDUCT OJT	16
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	16
B77 ORIENT NEWLY ASSIGNED PERSONNEL	16
D163 DEVELOP TRAINING AIDS	16
D181 WRITE TEST QUESTIONS	16
D162 DEVELOP TECHNICAL SCHOOL COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	16
D161 DEVELOP PERFORMANCE TESTS	16

TABLE A36

GROUP ID NUMBER AND TITLE: GRP251 - SUPPORT INSTRUCTOR PERSONNEL
 NUMBER IN GROUP: 8 PERCENT OF CLUSTER: 24%
 MAJCOM DISTRIBUTION: ATC (88%), AFCC (12%)
 LOCATION: CONUS (100%)
 DAFSC DISTRIBUTION: 30352 (63%), 30372 (37%)
 AVERAGE GRADE: E-5 AVERAGE MONTHS IN SERVICE: 105
 AVERAGE MONTHS IN CAREER FIELD: 91

GROUP DIFFERENTIATING TASKS	PERCENT MEMBERS PERFORMING
D177 PREPARE LESSON PLANS	100
D144 ADMINISTER OR SCORE TESTS	100
D158 DEVELOP FORMAL COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	100
D161 DEVELOP PERFORMANCE TESTS	100
D181 WRITE TEST QUESTIONS	100
D152 CONDUCT TECHNICAL SCHOOL CLASSROOM TRAINING	87
D169 EVALUATE PROGRESS OF TECHNICAL SCHOOL STUDENTS	87
E200 LOCATE INFORMATION IN TECHNICAL, STANDARD, OR SUPPLY PUBLICATIONS	87
D154 COUNSEL TRAINEES ON TRAINING PROGRESS	87
D176 PREPARE INSTRUCTION TRAINING AREAS OR FACILITIES	87
D155 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	87
D163 DEVELOP TRAINING AIDS	87
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	75
B59 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	75
D178 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	75
E204 MAINTAIN COUNSELING FORMS	62
D145 ADVISE UNIT STAFF PERSONNEL ON TRAINING MATTERS	62
D170 EVALUATE TRAINING METHODS OR TECHNIQUES	62
D148 BRIEF PERSONNEL ON TRAINING METHODS OR PROCEDURES	62
A27 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	62
D172 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	50
F312 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	50
D157 DETERMINE TECHNICAL SCHOOL TRAINING REQUIREMENTS	50
D151 CONDUCT SECURITY TRAINING	50
D150 CONDUCT SAFETY TRAINING	50
D175 PREPARE COURSE CONTROL DOCUMENTS	50
D174 PREPARE CHANGES TO COURSE SUMMARY DOCUMENTS AND COURSE OBJECTIVE DOCUMENTS	50
C134 PERFORM SELF-INSPECTIONS	50
D162 DEVELOP TECHNICAL SCHOOL COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	50
B75 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	37

END

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DTIC